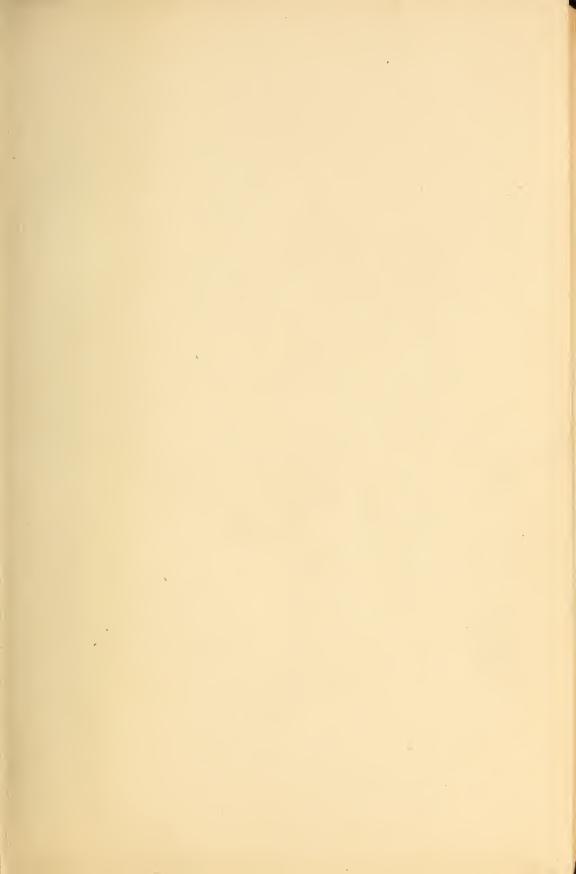
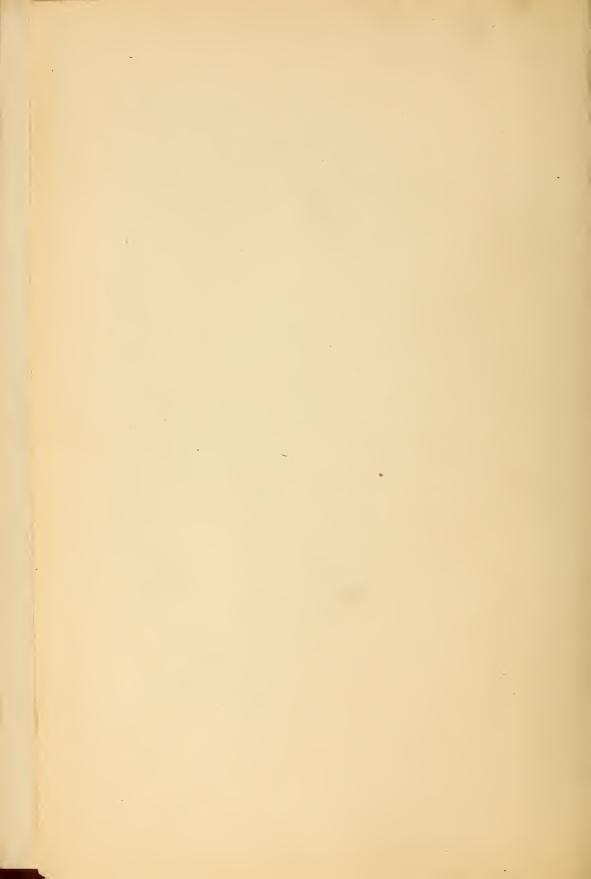




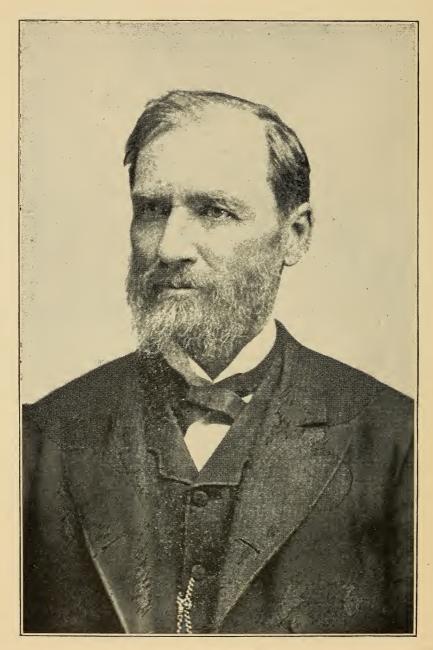
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WILLIAM ALLEN.

MATTER, MAN, AND SPIRIT.

THEIR RELATION TO SCIENCE AND PHILOSOPHY.

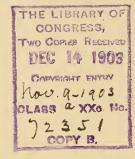
BY WILLIAM ALLEN.

"Prove all things; hold fast that which is good." (I Thess. v. 21.)



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PREFACE.

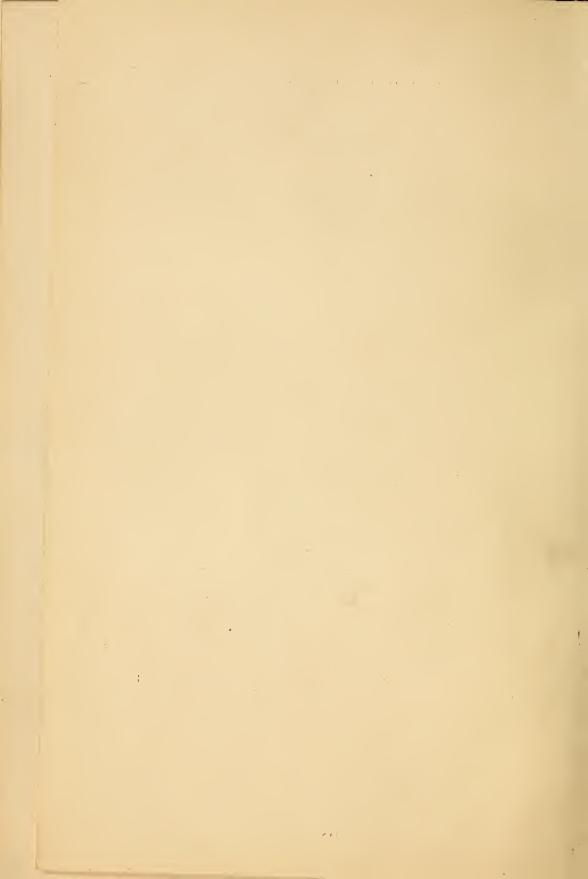
THE introductory chapter may be read or omitted. The author would advise the reading of the other chapters first. When they are read, if the reader is not satisfied with certain grounds assumed, then he may read the introduction with probable profit.

The author regards this little volume, taken as a whole, as more suggestive than demonstrative. It is a pioneer service in the scope and territory of its thought. Where there is no satisfactory demonstration, it is hoped that the suggestions are sufficient to lead others to meditation and advancement in what has been undertaken. In the survey made the author is well convinced that the world generally, not only in religion but otherwise, is running by the belief of things rather than by knowledge. Hence, he has tried to refrain from all dogmatic expressions.

Books are numerous, but no more so than the people. It is believed that only a few books of merit have failed to get the recognition they deserved. This little volume is cheerfully submitted to the reading public with a hope that it may do some good.

THE AUTHOR.

Frisco, Tex., July 7, 1903.



INTRODUCTION.

SINCE having written the chapters of this book, lest the reader should conclude that unwarranted grounds have been assumed without effort to make the proper proofs, it is thought best by way of an introductory chapter to prelude those that follow with a more particular notice of those grounds assumed and which otherwise might appear the more doubtful. The more so does this appear necessary since some of the assumptions are at variance with certain scientific ideas of the present day; nor are they altogether in harmony with cherished philosophy. There can be no employment of the mind more delightful than its search for the true relation of the spirit and material form of man and the relation that this compound and mysterious being sustains to the things of the universe, both physical and metaphysical.

As a general thought of these chapters, it is assumed that, in strict sense, man sees nothing but light, that all materiality is an obstruction to vision, and that man sees matter only as something in the way, an obstruction which vision cannot pass. This of course, in a degree, reverses the common idea of science which assumes that light is given as a means for the purpose of seeing rather than the only thing that is absolutely seen. Science claims, in order to the vision of anything, that an image must be formed on the optic nerve, or its expansion, called the retina; that this produces molecular action in the sensor nerves, which have a connection with the brain; and that the

(I)

brain has a direct and well-understood connection with the life and its qualities called mind and consciousness. In this view light seems to be regarded as a means or condition of nature by which man positively sees and becomes conscious of matter through his sense of vision. Yet an image formed on the retina is itself a sign that something has got in the way of vision. Since the spirit of man has connection with the physical world through a material body, this phenomenon is unavoidable and becomes a meditation of the mind.

But notwithstanding it is herein assumed that the spirit life in man, even while it is confined to vision through a material organ, can look into negative nature and see that condition called light. And yet, so far as natural light is concerned, the life does not perceive it perfectly because it sees the light through a material organism, and for the further reason that there is probably no such thing in nature as pure or distilled light, because everywhere there is more or less substance connected with it. Again, there are, doubtless, things substantially something that remain invisible as a fact, or as unacknowledged obstructions to vision because of qualities or conditions unknown.

It is hard to find a reason, if the soul of man is an entity at all, under proper conditions of light, why such entities, either in their reflections or shadows, might not be seen. If the soul through a material organism sees in the light and sees the light, why not in pure or distilled light see such a thing as itself, or a shadow or reflection of itself? If light is a mere condition of nature and unsubstantial, such a thought is not altogether out of reason, although such a thing may

have never consciously appeared. About the only reason standing against this view of the case is the fact that the soul would be looking upon and into pure light through a material organ which would itself be an obstruction to its vision. Air is regarded as invisible, but it is not positively so; for, like all materiality, it is, in a degree, an obstruction to vision. It is therefore seen obstructively, as all physical things are seen. Hence there is always something hedging a man from a vision of things in metaphysical territory. Should man by some chance discovery or invention find a way to purify the natural light, he would yet have the greater task before him of purifying the natural organ of vision before the soul could look upon such things as itself or on its reflections or shadows. Anyway, if light is to be considered as merely a condition of nature, substances are to be seen obstructively in the degree of purity of the light and the organ of vision. In the highest degree of purity in these every substance of nature should be obstructively visible.

But it requires a great effort to believe that light is no substance at all, that it is a mere condition of nature even as darkness is but another condition, yet nevertheless that such is true is not without evidence. Light may be a mere effect, reflection, or condition of nonentity produced by the action of forces; and, so far as reason is concerned, it had as well be light as darkness or anything else of an unsubstantial nature. Now let it be hypothecated that light is not a substance. Then all substances must appear in it obstructively as some solid material or in the degree of shadows according to their attenuation. Yet only the coarser forms are visible.

Substances are known to exist whose forms or shadows have never been perceived by the vision of man. This is no proof, however, that their shadows are not in the light, but rather a proof that the soul is unable to see all substances through a material body.

It is commonly said that man sees a tree, a mountain, smoke, or vapor; but he does not really see them. They simply mark the end of vision in their direction, and assume a hue that light gives them in its distribution. Light is a condition of nature to be seen illimitably, and would be seen illimitably if there were no obstructions to vision. Even through a material organ the soul sees to the fixed stars. There is no reason why light might not be seen to the extent of its existence if within its sphere and in the material organ of vision there dwelt no obstruction. The living principle, then, that sees would not see things under an angle of vision like any and all materiality or obstructions are seen, but in the broadness of universal light. This would supersede the services of the sensor and motor nerves. In this condition unseen entities might be perceived; yet they would be seen under the angles of their magnitudes and only in the degree in which their attenuation would produce obstructiveness. Man's weakness is his greatest fault. It belongs to his reason as absolutely as to his sense of natural vision. He sees, he reasons, he thinks "through a glass darkly," all as in a riddle; always coveting the hidden mysteries, and always unsatisfied with his knowledge. Shall he thus remain? Shall he ever know as he is known?

But let there be a pause while an illustration is given showing the way in which the spirit of man sees the light. Place him in the dark caverns of the Mammoth Cave. What a condition of nature! How helpless the soul through its material organ of vision! The very darkness is as truly a wall around his vision as the limestone cliffs. He sees nothing but the obstructing darkness, and it is nothing. Now remove him to a place where the gateway of entrance gets in view. Hemmed in by these cavernous walls, he is yet three hundred yards from that small gateway. All around him, in every direction except that small gateway, there is perceptible change in the darkness. Yet he distinctly sees the point of light at the entrance. sees it not as a piercing beam from the sun but in the softness and unobtrusiveness of light itself. He sees it as light that stands between the hills, as trickles down through the forest trees. He sees it as a spot at the entrance of the dark chamber, and it seems to be as stationary as the rocks around it. Had he never seen light before, it would appear to him as a soft substance delightful to the touch. This small spot of light does not affect the vision far back in the cave except in its own direction. If a man were walking back with his eyes turned away from it, the light on the cliffs could give him no consciousness that light was in sight. Yet with his eyes turned toward it he sees it with the softness and clearness of open day. It does not affect the cliffs around him, yet if there were a human eye on every square inch around him each eye would see the fullness of the light at the gateway.

Why is this, and why do one and all see the light so clearly when it is so dark around them? From their position they could read a signboard at the en-

trance; but if brought in, it would be as dark as the cliffs around. They see the light at the entrance as plainly as those already there. They see the light in its full quantum. They see the people and every obstruction in the light from their position to the gateway. A man may see his companion before him, but he cannot see the one behind. They see the light through a territory of darkness. They see it not as something like a substance coming in to meet them but as an apparent fixture like the rocks at the gateway. They see it altogether not because a ray or a thousands rays fall upon their eyes but because it is light and the soul of man is able to see it through the natural organ of vision and because the soul can see nothing absolutely but light, and that every substantiality, whether physical or metaphysical, can be seen only as an obstruction. Light, therefore, should be regarded as an effect, or merely as a condition of nature, and not in any sense as a substance. Its radiation or a beam of light cannot be a substance; or, if so, it becomes confounded with the emission theory. such a view the wave and corpuscular theories get inextricably mixed and confused. But if light be regarded as unsubstantial, the motion of cosmic ether may account for its reflection with the speed that motion is conveyed, and no more. Water waves and sound waves are not substance carried forward. The substances only rise and fall with scarcely perceptible precession, and yet the waves advance rapidly. Nor is it therefore to be regarded that ether waves carry substance of light. If light is held as a substance, it would be more appropriate to assume that the interstellar ether emits the substance; but this is again merging into the emission theory.

With the foregoing view the spirit of man casts its vision out into negative nature and sees light which is not a substance, looks into and perceives a condition of unsubstantiality and finds a difference in its appearance from that other opposite condition of negative nature called darkness. But it may be asked: How is this possible? How can the soul see and be impressed with that which is substantially nothing? To answer in part, may it not be asked whether vision itself is a substance? Of course all agree that it is not, but simply a quality of the life. Then does it not appear that an unsubstantial quality connects the substantial with unsubstantial or negative nature, and that all substance is seen in such a condition as an obstruction? The soul or spirit is a substance, but the mind and the soul sense are qualities belonging to the life, and without which they must be nil. The life sees through or by an unsubstantial quality of its nature. Hence the soul's vision is connected through an unsubstantial quality of its nature with the reality of unsubstantial or negative nature, and realizes and sees light, which can be nothing more than a reflection or unsubstantial effect.

In this connection time may be fitly taken to show how, in a general way, negative or unsubstantial nature may affect the human soul. When the loving wife looks into the face of her dead husband it is not that substantial dead form that provokes her tears, sorrow, and lamentation, but the negative side of the question, the absence of his life. She realizes, sees, and feels this negative side of nature. She is in some

way in sight of it and in touch with it. It is a positive, an absolute absence in touch with her life. Again, when an unarmed hunter meets a grizzly bear he is conscious of two things, the ferocity of the beast and his own fear; the one a substantially recognized and dangerous enemy, the other a merely negative quality of the spirit within him. But this fear is in immediate contact with his life even while the bear is at a distance. His touch with fear and his vision of it give him the same consciousness of its existence as the sight of the bear gives him consciousness of his dangerous enemy. The bear would be no more than an innocent lamb in the way were it not for a quality of the life between the two substantialities, the life and the bear. These things have been mentioned as illustrative of that which the soul perceives—light and darkness. The living husband is light, and the dead husband is darkness.

Ex nihilo nihil fit, is a maxim of materialism. It is the sentiment that matter is eternal. In view of the attenuation of substances, nothing and a beginning to be are equally lost in the conception. In this strange evolution the one reflects itself on the life as much as the other. An infantile beginning too attenuated to form a shadow and yet not possessed of force is so much like nothing that the human mind is incapable of making a distinction. Yet that beginning grew from a seed, and that seed was nothing in the hands of the Eternal Power. Life lies out substantially so near and has such kinship with such beginning that it has been given a sense perception not only of existences but of that condition of nothingness out of which substantial nature has been made. Hence, in looking

upon it, the mind at one time is found measuring space and weighing gravity; at another, contemplating the conditions of light and darkness. The life is so constituted that it is easily able to look into that condition of nature called light, and it need no more be believed that it is a substance than that the shadow of the earth on the moon is a substance. Neither light nor darkness is a substance. They are both posited on the conditions of other things, and appear or disappear according to those conditions. One cannot be said to have a velocity greater than the other. They are each a reflection from nature; one when cosmic ether is in motion, the other when it is at rest. Make a new fixed star at the distance of Sirius, and years would pass before its light would reach the earth. Suddenly blot it out, and it could still be seen by the eyes of man for the same period of years, but with gradually dying brightness. From the star that lost its luminosity darkness would chase with the speed of light's recession toward the eves of man.

There is such a habit and constraint in man to make everything matter of some kind that he seems to lose his patience at the mere mention of the perception or visibility of that which is nothing at all. He readily admits that darkness is nothing. Yet he sees darkness in the sense that he sees any physical obstruction to vision. In the midst of this darkness he is still in connection with physical nature through his other senses. He hears the music of birds, of trembling pipes, and those coarser noises of falling timber and resounding thunder. He feels and distinguishes the things around him as round or square, smooth or rough, hard or soft. He distinguishes between the

sweet fragrance of the flowers and odors that are offensive. He tastes the viands of the table and distinguishes the best. In this cosmos of four senses the life or spirit is in contact partly with positive matter and partly with nothing at all. Sound is the thing heard, and yet it is substantially nothing. So light is the thing seen, and it also is nothing. Sound cannot be called a substance, although the air is necessary to its existence. It is posited on the conditions of other things. The quick, sudden motions of the air, and its equally quick and sharp clapping together to fill the produced voids, may affect other physical bodies, may shake a house and even break the window glass; yet it is not sound that breaks the glass, but aërial disturbance. Even mutes may feel the sensation, but do not hear the sound; for sound is not a substantial entity acting on the physical man, but an unsubstantial sensation or impression on his life. Although the material air and ear are necessary, they do not produce the sensation and consciousness of sound. Because the ear is set in the body and is necessary that there might be a conscious sensation of sound in the life, it is not a proof that sound is substance. Therefore the substantial life is connected by its own unsubstantial qualities with unsubstantial things, as light and sound, and thence with the media that give things which are substantially nothing their apparent being.

Seeing and not seeing, so far as that sense is concerned, are different and opposite conditions of the life. With the eyes open and shut are two conditions of life, and one as natural as the other. The act of seeing contains in it nothing more than the non-act. Darkness is one condition of nature and light is an-

other, yet substantially the two conditions are the same. Interstellar ether is an unchanged substance in either light or darkness. The sun and every luminous star might exist as opaque bodies in their full quantum of substance, and there would be no light. But give the matter of the sun a molecular action that would develop heat and luminosity. To say that it emits the generated heat and light as particles would be to reëstablish the abandoned corpuscular theory. To say that the particles of heat and light are reflected by cosmic ether, or that these particles are conveyed from the sun in the cosmic ether or in any other substance, would still denote an entanglement with the emission theory. How, then, can light be a substance of any kind? If it is substance, it must get that substance from the ether; but even this would give too close a resemblance to the corpuscular theory. In truth, the case stands about as follows: If the light is a substance, the emission theory in some relation is true. If it be unsubstantial, the wave theory may be true. But the emission theory cannot account so well for the phenomena of light, and therefore must be rejected. Light is therefore a merely unsubstantial condition of nature, and upon this well-hypothecated basis belief may be indulged that the wave theory may be true.

It may be further said that light is unintelligently seen unless there is consciousness of its vision. Without consciousness man is intelligently dead to all the universe contains. He is dead to light, sound, to all substantiality and to all unsubstantiality. Nothing but the involuntary and unconscious condition of life would be the whole of him. Yet man is conscious that he thinks; but his thought is not a substance, nor can it

be determined that substance is contained in the thinking act. Yet man in some sense handles his thought as he does a material body. He sees it, it is before him, he takes hold of it, weighs it and measures it, considers its value, rejects it or applies it. So with space. He beholds it, measures it, in a mysterious way takes it into his hands and considers it as he would material things. Space is a phenomenon, but lacking in phenomena. Thought and space are nothing. Yet they are perceived; and if perceived, they must in some sense be seen, although not through the natural sense. Why not thus see light through the natural organ made for its perception, though it be nothing, though it be as unsubstantial as thought and space themselves? Consciousness of space and thought is in some sense to see them; consciousness of light is to see it. Consciousness of the obstruction to vision is to see the obstruction in its own line or under its own angle of vision. But why all this? It is simply the life or spirit looking directly on those things. It is a quality of the life called the mind that takes them into consideration. As long as it is allowed that man has consciousness, and that he has consciousness of things both substantial and unsubstantial. it must be allowed that the unsubstantial is not altogether invisible. Or else how could man hold the unsubstantial in contemplation? He cannot see the unsubstantial in the intellectualism of pure life or spirit, but simply in the intellectualism of man in an organism of matter. This implies the embarrassment from which man cannot extricate himself. His is an intellectualism rendered obtuse, like his natural senses, through a material body.

There is a great difference in the use, strength, and compass of the senses. Touching, smelling, and tasting are particularly connected with matter. They belong to this category. Touch is not a local sense, as the eve or ear. It is the sense that covers the whole surface of man, and is in the eye and ear as delicately as in any other part. It is in the man as well as on his surface. It is in the whole nervous system, whose lines, both visible and invisible, ramify through the whole physical form. The senses of smell and taste are local, and appear to incidentally exist. The mouth is formed for speech and to receive aliment, and the nose for respiration; yet in the mouth and nose these senses are particularly located. Smelling and tasting are peculiar and delicate ways of touching matter and of discovering some of its qualities, and even this is as much a discovery of qualities in man as in matter. Yet in the particular places of taste and smell the general touch exists as in other parts of the body. In their relation to matter these three senses may be regarded as senses of touch. The general touch is incapable of discovering certain qualities of matter and of man himself, and therefore it is supplemented with local and delicate senses of touch—the smelling and tasting. These two senses discover qualities of matter in its infinitesimal magnitudes, or in particles too small for the general touch. These three senses, or this one compound sense, hold a different relation to the life from the seeing and hearing. They connect the life in no wise except with matter. They are very closely connected with the mere animal life, and are necessary for both its comfort and safety. There are no obstructions in their way; for while matter is an obstruction to vision in the light, and may be also to sound, these three senses have no relation except with the obstructions themselves. Light is not at all necessary to their exercise.

From the foregone statements it may be perceived that the life is both directly and indirectly connected with matter: by the lower and coarser sense of touch directly (that is, by the touching, tasting, and smelling); by the higher senses indirectly (that is, by the seeing and hearing). Matter is not seen and heard, but is touched. It cannot be seen through the natural sense contactually, but at proper distances as an obstruction. In the lower senses it is matter touching matter, the material body touching extraneous substance.

There is accuracy of judgment concerning touch. A man cannot touch without being touched. He not only has consciousness that he is touched, but also of the very spot that touches or is touched. Touch not only shows a quality of substance touched, but also a quality of the impressed life that is sensible to the touch. Touching may be outside of the body or inside, a contact with extraneous substance or a contact with some portion of the body itself; it may be some object without, or some pressing inflammation giving pain within. But whatever or wherever it is, the place is located with clear judgment. There is likewise accuracy in sound. It comes to man from all courses contained in a sphere with himself as a center. Yet he easily discerns the course of its origination and can fairly judge of the distances.

It is hard to conceive how there could be sound without rarefactions and vacuums in the air. It cer-

tainly must originate by the smacking of the air together, or its smacking against a material substance. The rolling thunder indicates the former, and the rushing in of the air when a gun is discharged indicates the latter. The air pressing in with a weight of fifteen pounds to each square inch, because of its wonderful elasticity, will certainly smack itself against the material substance with great force. The greater the vacuum, the more deafening will be the sound, because of increased disturbance. But in rarefied or thin air motion is less hasty and the disturbance is proportionally of less degree.

But what is sound? The world has been full of explanation from ancient times. A tyro at school can understand what is meant by water waves, aërial waves, and ethereal waves. He can easily be acquainted with rarefactions, condensations, vacuums, wave crests, and wave fronts. But still these do not satisfy, although they are admittedly knowledge in the right direction. He would still know what is that noiseless thing coming toward him through aerial motion at the rate of 1,142 feet per second. He sees a fellow standing in the distance toward the coming sound, and when it reaches him he sees him jump as though he were frightened. Yet he himself sees nothing and hears nothing coming toward him. But presently he himself jumps as in fright like the other fellow. The deaf man standing by his side smiles at the action of his comrade, neither hearing nor conscious that anything had come and gone except the amusing action of his comrade. This is what is called sound and the passing of a sound wave.

But still the question is asked: What is sound? It

is certainly not matter nor substance of any kind. It seems most strikingly to be nothing more than an unsubstantial quality appearing in nature on the action or condition of certain substances. As a quality it is objective, but requires a suitable living organism to discern it and an intellectualism to consider its phenomena. The matter or substance through which it passes has only an upward and downward or backward and forward movement, with but little advance gain. One wave quickly follows another, and the waves and sound are strictly in company. Yet it is hard to conceive that through all the distance sound travels there is maintained the instantaneous and sudden motion that was at the place of its origin. Yet it must be true, for the velocity of sound is uniform in the same medium. It is true that sound by distance shows weakness in its strength but never in tone. In order to preserve the tone of sound with decreasing strength, it must be allowed that the vacuums formed must preserve equal area but a regularly decreasing depth. By and by the depth is so small that there is no hearing of the sound because there is no sensible clapping together of the air.

But is the sound made at the place of its origin the sound that may be heard at any other place? Or are there not as many sounds made as there are wave crests or formed vacuums? And is not sound, like its producing wave, lost in its own neighborhood? Really it seems that as soon as sound is made it is lost, but that at the instant it is lost there is made another wave which generates another sound like unto the first, and so on successively as far as the waves extend. So then, though a sound wave may be produced in the

distance, the sound that is really heard is produced by a present wave. Each wave produces and loses its own sound. In other words, there are as many sounds as there are condensations. A man therefore does not hear a sound in the strength of its origin but in the strength of the present wave that produces it.

But the question may well be asked why, when sound is heard, there is also an impression of the place of its origin, however near or however far away? It is very probable that this is done, at least in a degree, by a perception of the different strengths of sound waves. But perhaps, to be a little more philosophical, it may be said that there is a kindred nature between sound and light—not simply in the respect of their unsubstantiality, but in their effect on man. When there is present light, it may be, if not local and artificial, different from the light at its source. The light on the earth is not the light of the sun. Yet a man can see to the source of its origin. So with sound. A sound present may not be the sound at the origin of the sound wave. But man is so constituted that out of a present sound he hears to the place of its origin and knows the direction whence it came.

But the question still stands to the front, and it is again asked, What is sound? May not another question be put alongside with it, and ask, What is light? The key that unlocks nature to the understanding and shows what either is will very probably reveal the other.

As before stated, touching has much to do with matter, whether it be the general touch or those particular and delicate touches called the smelling and tasting. But the seeing and hearing have nothing to

do with matter directly, though matter in its related phenomena may have something to do with them; for the act of seeing light contains within it the sensation of unobstructing nothingness. It may be admitted that a substantial medium is necessary in order to see and hear, but it cannot be admitted that the medium is the thing heard and seen, yet the touch gives the sensation that obstructive matter produces. Air and ether are only mediums for audible sound and visible light.

If the successive aërial and ethereal waves instantaneously lose their sound and light, and just as instantaneously create sound and light in the next succeeding wave, it may be very clearly perceived how that light is continuous at any and all points. But the air is not continually producing new sonorous waves from the place of its origin. In this respect it differs from the sun as a constant center of light and just as constant in producing ethereal waves. The air gives only one pulse of sound wave, following with a rapid disposition to restore a normal condition at the center or place the sound was produced.

The thought of making sound a substance and light a substance is the natural plague of materialism from which it is hard for the mind to make its escape. It is so easy to handle material things, all of which are simply obstructions facing the real man, and it is so nearly as easy to handle and put under management certain recognized substances not seen as matter, that to go one step farther and consider things or conditions that are really nothing at all is such a trespass upon materialistic precepts that he who would do this trespass is not likely to receive the appreciation that coming years may vindicate. Yet it is a fact that

things which are substantially nothing, but to which are given a name, are held in contemplation, considered, divided into parts, and reasoned upon as though they were substantialities. It should not be overlooked that, if material things measure so much space, that space also reversely measures them. The occupation of space by a material body is not at all destructive of the space, any more than that space destroys materiality. The one exists as really as the other—the one substantial, the other unsubstantial. They simply here and there get into uncomplaining partnership. And really there is just as much force in space as in matter per se. They both contain one another, and so the contained and the container are but ideas of relation. If the human mind can take hold of things that are nothing the same as it can the things that are materially something, it affords some evidence that the sense of man is not altogether confined to substantialities. Seeing, handling, and dividing things that are known to be substantial are exercises of the life mind otherwise than through the material senses. Nevertheless it must be allowed that through this perception there is a vision of some kind.

If matter and all things substantial, except the intelligent Originator of First Cause, whatever may have been the nature of the productive evolution, sprang from nothing, then it may be conceived that by the exercise of a similar force they may be eliminated from the universe. The force that made the universe possible is a power that contains the possibility of its extinction. The only ground of objection to this idea is not one of ability but whether it would be absurd

and a reproach to the intelligent character. The argument would be shifted upon moral grounds.

To affirm that from nothing nothing comes, and from nothing all things sprang, is a contradiction. The materialist denies the latter of these propositions and affirms the first. In doing this he makes the eternity of matter a necessity. The opposing class of thinkers affirm the latter of these propositions and deny the first. In this day they recognize the eternity of an intelligent and all-powerful First Cause. It is on the ground that matter is not eternal, but a creation, that the argument is continued that the sense of man is connected with both something and nothing, and therefore that light and sound need not be substance in order to be seen and heard. That is to say that the life through the eye and ear can see and hear into the nothingness of the uncreated condition so far as materiality casts reflections and shadows of it.

The question may be asked: What difference does it make with the creative energy as to which was created first, the light and sound or the eye and ear that sees and hears? None at all; for, so far as vision is concerned, the eye is needless without the light and the light is needless without the eye. All this is true of the ear and sound. For reason's sake let it be granted that light and sound were first created as qualities of substance; then a being created as man. He must not grow into adaptation to the existing creation, for this would be a dangerous experiment to his life and also a reflection upon the intelligence, power, and moral character of his Creator. Considering the consistency and order that run through all creation, the man must be made adapted to the existing created conditions.

Hence he was given eyes and ears to catch the unsubstantial qualities of substance and a touch to feel the substance itself; not to see and hear all unsubstantiality, nor to feel all substance, but with ability to see, hear, and feel in part, and in the order of his created being and place. He, being material in his body and substantial in his life existence, is in a position to feel matter and to see and hear the unsubstantial reflections and shadows called light and sound.

Although the very thought of it is bewildering, yet there is made no denial of the velocity of light, of ethereal wave lengths, and that more than six hundred trillion waves of light fall upon the most delicate and tender organ of the human body each second of time; but a denial must be urged that light is a substance of any kind. Attentuate it to the last approach to nothingness, and still reason would assert that light would be ruinous to that organ. But it is needless to use further words at this point in the argument. It is enough to say that both the wave and emission theories of light are, themselves, a virtual proof that light is not a substance. When every phase of the question is duly considered, it is more difficult to allow that light is a substance than to admit that some of the unsubstantial in nature is audible.

But some one may be disposed to affirm, since light is brought into subjection and its colors shown, and because it is reflected, refracted, converged, diffused, and polarized, that it therefore must be a substance. Yet no one has ever affirmed that it is a substance as a known fact. It has simply been treated as a substance and passed over as such because of its phenomena. The world has been taught to look upon it as a sub-

stance of some kind. The trend of thought has been that it looks like a substance, has some of the behavior of a substance, and therefore it must certainly be a substance. As to the meaning of substance, an atom, an individuality coarse as discerned matter or more refined than matter, it may be said that only the third measure in geometry can detect it. A line has length and extremities, but it is not substance. A plane, which is a figure bounded by lines, is not substance, for it has no more than an infinity of crossing lines and is made of the areas of crossing points. But a third line rising from the plane would denote substance, because it indicates thickness or depth. Hence a substance indicates cubic measure. This, however, does not mean to say that light, darkness, sound, and other unsubstantial things are without volume.

As to colors of light, they are seen the same as the white light that contains them. They are seen in the unsubstantial rainbow and upon a white ground in a dark chamber when a beam of solar light is spread out by a prismatic lens. If light may be seen as a whole, it may be seen in its parts. Anything that can be seen as a whole, substantial or otherwise, may be seen in its parts until the parts become too infinitesimally small. Color itself may be divided into points too small for visibility; and so with white light. Colors appear the more distinctly visible because of their contrasts. Color is no more an obstruction to vision than white light that contains the color. The color of an object is in the light all the way from the eye to the object. It may be illustrated by the rainbow when the drops of rain are sprinkling round. The bow appears as a fixture at the farthest part of the rain, but the colors are all the

way from the observer to the place where the bow is seemingly fixed. When a rainbow is seen with a mountain beyond it, seemingly the mountain is rendered invisible by the bow: that is to say, the color becomes an obstruction to vision. But it is a deception, for the whole mountain can be seen only in its colors. The zone of the rainbow across it is as much the color of it as any other. There is, because of substances the atmosphere contains, always more or less reflection of light before a great material object is reached. These aid in giving colors to the mountain or any other object. Distant objects change in color with the stages of atmospheric conditions. On either side of the rainbow the sky looks blue, but the sky in the direction of the bow looks red and violet, with all the other colors in between. This is simply a painting of the colors in the sky, an imprint of the colors of the bow on what would be the whole sky if there were no bow. color of the sky is only a ground on which the bow is painted. It is really white light, but deceptively blue. So a white screen which answers the purpose of white light is a ground on which the prismatic colors may be displayed. Yet they are not stationary as they appear any more than the colors of the rainbow, but are as color all the way from the eye to the place where they appear to be fixed. As an evidence that the rainbow is not an obstruction to vision, one of its colors is that of the sky, and yet that color to all appearance is as much an obstruction to vision as any other, and is as fixed as any.

The visibility of colors is a proof of the visibility of light. The visibility of light, it being unsubstantial, is proof of the invisibility of matter, which is its oppo-

site. At least this must be true in any positive sense. The invisibility of matter is also evidence of the invisibility of finer or more attenuated substance. This throws the vision into the shades and reflections that are produced by substantial nature, though these shades and reflections be nonsubstantial. Therefore many deceptions befall the eyes, and because of it about as many the thought of man. These deceptions make matter the only thing seen; whereas light, whether as white light or light in its colors, is about all that is positively seen by or through the natural eyes of man.

In view of the foregone considerations, light is assumed to be nothing more than an unsubstantial radiation or reflection; also that this unsubstantial light is visible to the life through the natural eye of man; and also that the life perceives or sees other nonsubstances of nature otherwise than through the natural sense, and that the mind labors on these things of perception, whether they come through the organs of the body or otherwise. Yet it may be that natural or ethereal light is necessary only for materialized beings. It is the nature of life to see; but it is the office of the mind, as the great intelligent quality of the soul, to think upon and contemplate the light of anything else the soul sees or hears as a fact of vision or sound, as well as to consider any material thing the material body touches either by the general touch or by those particular touches called the tasting and smelling.

This places man, as a being with soul and mind, between matter and the absolute nothingness behind it; that is to say, as a created being, he is everything from matter to the absolute nothingness of nature, and has a

mind that, in a degree, surveys the whole ground. a process of reasoning be indulged backward from his material frame, there is no escape until there is found associated with its being something of nothingness. First behind his material body there is recognized his life, which must be regarded as composed of substance. Behind the life there exists the mind, which is a high quality of the life, but whether substance or nonsubstance no one seems to know or can know. And yet behind the mind there are qualities of its own possession such as thought, memory, consciousness, pain, sorrow, grief, remorse, felicity, and a host of other things that are called and passed over as states or conditions of the life or soul. It all shows that, so far as substance is concerned, there is exhibited in man a feature of nothingness and that he has about as close a connection with the nothingness of nature as he has with the substance of things.

Only one more word about the wave theory, the probable truth of which is not denied. Does it tell what light is? Does it either affirm or deny the substantiality of light? Verily not. Do the great advocates and teachers of this theory leave any logical inference concerning the consistency of light upon which their pupils may rely? Indeed not. That which is wanted is to define what light is. To lecture and write about luminous bodies, the action of ethereal waves, and the velocity and laws of light do not answer the demand nor satisfy. Is light a substance or nonsubstance? If a substance, what kind? If a substance, is it divisible or indivisible? If divisible, is it not composed of corpuscles? If composed of corpuscles, does not this in itself endanger the wave theory? Is it not

meant that the wave theory is based on a principle diametrical to the corpuscular?

Both the wave and the corpuscular theories speak of the velocity of light; and indeed there is great velocity of something. But does not the wave theory merely mean the velocity with which ethereal action is transported, and that ether is given this action by the influence of a self-luminous body? Does it claim that ether in action is light itself? It is thought not. If that were true, inactive ether would be darkness, which is but a name for nothing—that is, ether is something or nothing according to the influence of other things.

The emission theory assumed that light is substance. Is it unreasonable that the wave theory should declare on this point and say that light is substance or that it is not substance? Some positive declaration is needed. Herein it is declared unsubstantial. The corpuscular theory is unsatisfactory, relegated, and now considered exploded. Yet that theory held that light is substance. It went that far to tell what light is. It declared that it is composed of luminous particles ejected from a luminous body. Cannot the wave theory declare whether or not light is composed of luminous particles of substance? It must be something or else it is nothing, a mere condition of reflected nature.

If light is best accounted for under the wave theory, is the time not at hand when there should be a positive declaration as to what light is—a substance or non-substance? Light is not hidden from the eyes, nor does it exist in theory like an atom of matter or as cosmic ether, but as a positive fact. It is not an obscurity of thought nor a thing theoretically substituted to give an account of something else. It is here, taken

in hand, turned about, converged, diffused, and decomposed into its various colors. And yet, if it is not substantially nothing, who will rise and tell its substantially something? If light, which is so conspicuously seen, be really nothing, is it not passing strange that man has such a known connection with the nothingness of the universe. The very thought of it introduces the following course of reasoning on what may be called

THE SIXTH SENSE OF MAN.

Before entering upon a discussion of the sixth sense, it may be necessary to say a few words concerning what is to be understood by things substantial and things unsubstantial in nature. It must be seen that the word things is used because it is hard to find an altogether suitable word to convey the idea intended. By substance is meant a name applied to something that has a real existence as a principle of some kind; a thing that, when thought upon, is regarded as actual as matter itself, though it may be unseen, unheard, and untouched by human sense; a thing derived or created; a thing, in whatever degree attenuated, the opposite of nothing; a thing having both extension and limitation and filling a place or office in nature in order to complete the arrangement of the universe. nothing is meant no substance; or the absence or opposite of all substance, even as darkness is the absence of light, though light itself be nothing. By nothing is meant the condition of nature, such as it was before there was anything derived or created, and such as nature is this day in every place where no substance exists. It is also meant to signify those

qualities of substances in which there can be only a conception of nothingness; or, as may be stated, the mind of man makes a distinction between substance actual and qualities unsubstantial.

This brings the thought up to a consideration of the sixth sense in that living existence called man. He, being the highest type of earthly creatures, affords the best and perhaps the only example for its illustration; for creatures lower than man, not being endowed with mind, are scarcely to be regarded as in possession of a sixth sense of perception as shall be herein treated. For this sense, implies mind, thought, and reason which they too meagerly possess. It implies that order of mind and intellectuality that is impressed, wonders, and thinks over the things of perception. Man is the only earthly creature of this kind, and therefore in treating this sense in him it is a look into him in his connected relations with universal things.

The sixth sense in man, after a fashion, has long been acknowledged. There has long been an uncertain, mystifying look after it, but its professed existence has been through such a haze that courage has always broken down at the threshold and emollients poured on the soft words spoken about it; so that all that has been said about it, when placed in full catalogue, amounts to very little. The profound depths of its existence have not been penetrated. There has been lack of breadth in its acknowledgment, and for this reason proper proofs of its existence have been unattempted.

Commonly, the sixth sense, differentiating from ordinary sense perception of matter, has been applied to such experiences as thirst, hunger, chilliness, pain, and such like bodily conditions or states. This is only a

surface consideration, for it simply shows that the life is sensate of bodily conditions through the operation of the life's mind. It is a narrow view of this sense, because it shows no relation to extraneous substance and phenomena. It shows no connection with external nature like the seeing, hearing, and touching, which are built in the body and are the avenues through which the soul walks out into the external world, from things present which it touches to things in the distance both seen and heard. A perception of personal conditions and a perception of things detached and on the outside are very different. There is guite a difference between a consciousness of personal pain or pleasure and a consciousness of Saturn's rings, between a consciousness of personal hunger and a conscious meditation about light and cosmic ether.

Bodily conditions are but states of the body recognized and known to the life's mind. There is a unity of being and sympathy through any particular organism. If one member suffers, all suffer with it; if one has pleasure, all rejoice with it. Even the vegetable kingdom has its experiences under changing conditions, and each plant is much concerned about its own. organism. They thirst and hunger, and tell it; not in a voice like man, not with groans and sighs as man, but in discolored stem and in wilting, crimping leaves and drooping look; and they show their cheerfulness and laughing look when arrayed in the morning dew. They suffer pain without animal life and without intelligent man-consciousness of it, and instinctively eat and drink without thought. The sense perception is wrapped up in their own organisms and confined to their own bodies. The sixth sense, as herein treated, is used in a

larger and broader sense. It will be used as the equal, if not more than the equal, of those commonly called the five senses. And may it not be said that in a sense, in comparison with it, the five are in a condition of embarrassment and limitation. They are limited to the physical phenomena of matter, its radiation and reflections. The life's material body is necessary to connect the life with matter, and the five senses are the avenues of this connection. For all that is known, life unclothed in matter may be as unable to discern matter as life veiled in matter is troubled to discern the metaphysical. The senses that are set in the material frame are given the life for connection with the material world. They certainly and properly belong to this service; but if perchance they catch glimpses of things such as light and darkness, which are not substance at all, it is suggestively a token that in some degree they represent or illustrate the sixth sense of man, and that this sense has a scope and power beyond human consciousness or such consciousness as can possibly belong to materialized man. Man, having a dual quality of being, can have a consciousness suited only to his He perceives many things indistinctly as through a smoked glass, so much so that the universe to him threatens to remain an unresolved parable.

The sixth sense of man is of an inner nature, is concerned with the life principle directly, and covers the life as certainly and as generally as touch covers the body. It may with reason be affirmed that it is in and through the life, the same as touch is over, in, and through the body. It is the equal in extension to the seeing, hearing, and touching of the body. The five senses are signs, if not proofs, of its existence. Though

the life that contains the sixth sense seems not to see, hear, and touch, yet it is the thing that sees, hears, and touches and that receives the sensations that come by means of the natural senses and any other sensation that may arise through a sixth sense that has no direct connection with matter. To affirm that the soul has not and cannot have other connection with the universe except through the five natural senses is to affirm the unreasonable and improbable. To assume such ground is to affirm that the existence of the soul and mind is dependent on the body. This is but a crutch of materialism and needs to be put aside. The reverse is true, or at least the weight of evidence supports the other way. This is the only way of showing that the soul can live without the body. It has a sense peculiar to itself, and it is herein called the sixth sense.

But in order that the sixth sense may become more perceptible, let man's frame or body be considered for a moment. What is it? It is all earthy matter and subject to the force of gravity the same as any other clod of the earth. It is called a living body, yet considered within itself as matter it is as dead as any other piece of clay. It has no perception, it feels no sensation. It neither sees, hears, nor feels. How different is this from the commonplace idea! The body of man is simply a splendid and beautiful piece of material workmanship, an artistic arrangement of matter of different kinds with all the functions in harmony and built together for mutual assistance and benefit. It is full of motion as a whole and full of motion in every part. This is what gives it seeming life; it is that which saves it from immediate decay. The hour the motion ceases it becomes as any other dead matter.

Can any one declare and maintain that matter of any kind has done or is doing this work upon itself; that it produces in itself this bodily and molecular action, or that it sees, hears, and touches? If not, what then? It is here the mystery begins. Is there not a keeper within that pervades this whole structure, that sees it all, hears it all, and touches it all? Yet man has only consciousness and knowledge that the work is continually going on and that repairs are made. But the process of this work is too delicate and modest for man's natural sense. He can only know that the creation is a continual process and that the work is done, but he cannot discern the process nor see the force that circulates the blood, that throws out the waste and sets in place the new material; but at the same time he cannot deny that there exist unseen eyes, unseen ears, and unseen touches as well as the unseen force.

How is this incessant motion in the body continued? Why does not the blood at any moment stop at the heart and clot itself in the capillaries which connect the venous and arterial systems? What is it at the head of this force that continually keeps its hand on the lever day and night in both the consciousness and unconsciousness of man for a period of eighty years? Though man himself sleeps, this is something that never sleeps, something that always sees, hears, and touches about its own business; something of the finest discretion, makes choice, receives, rejects, and is free from mistakes. Every sight of disordered physical function, every sound of struggling blood, every touch of undue friction is but a token to the life within and a threat of dissolution. The life perceives and the life's own mind considers unaided by natural sense and

uses its own ways for repairs. But man comes in with man's perception, mind, and consciousness as an aid with all his discoveries. Man and the distinct life within become jointly interested over the body, and neither one can be ignored. Each has sense perception; the man has the five natural senses, and the life has what is herein called the sixth.

Perceiving, then, that the life sees, hears, and touches, and that it is the seat of the senses fixed in the body, it becomes plain that what is to be understood by the sixth sense comes under the classification of such perception as the life or soul has outside of those that come through the senses fixed in the body, but not so much through the touch as through the hearing and seeing. The natural touch is directly concerned with matter, but the seeing and hearing with things that are not matter. Sound is not matter, nor is light to be regarded as matter. They are to be looked upon as unsubstantial radiations or reflections. If the life with its mind perceives these through the natural senses of hearing and seeing, it gives out a large token of man's sixth sense, or that power of perception possessed by the life disconnected with matter and disassociated with the ordinary avenues of sense perception.

The life mind shows itself through the senses fixed in the body and also through its connection by the senses with the external world of matter, and makes itself a far deeper and more interesting study than the things ab extra with which it is connected. But it does not show itself alone through the natural senses; for it reaches out in no uncertain measure and gives proof that it is a thing within itself and fills offices independent of the body, though it be always associated

with it; that though the body can do nothing without it, yet it can do many things without the body. It gives proof that it possesses all the powers of perception independently of the body that are manifested through it; that the body has nothing to do with the faculties of the life mind, but is simply a building of convenience to be used and for the purpose of giving it connection with the material universe, and for the further purpose of giving to the universe a connection of life and matter or spirit and matter in that peculiar duality of intelligence called man.

The construction of the physical universe indicates that there was an era before matter, and that life and intelligence existed. When the era of matter came, this gap between spirit and matter was open and remained to be filled. Then such a being as man was made to appear to preserve the associated harmony and to add to the beauty of the wonderful arrangement; a being not of matter but associated with matter, even as every life or any force must be; a being able to discern through matter, but likewise able to discern independent of matter. In a moral sense this is called spiritual discernment.

But now comes the question of the uses and operations of the sixth sense. It has been already sufficiently explained that the life with all its faculties does not belong to the body, but the body to it; and that the body holds a place of subserviency to it, and that the body is but a means as an artistic and peculiar frame for presenting the phenomena, the strength, the power, and intelligence of the life mind. But, leaving all that behind, there is something in man that sees, hears, and touches disconnectedly with the body as well as

through it, a spirit mind associated with the body that controls it, but at the same time independent of it. Give it the name of the sixth sense as herein called, or any other, yet the fact of its existence remains the same. Nor is it certain that it is limited to solar light, aërial sound waves, or material substance for the operation of its sense of perception, for it is the perception of the life mind independent of the body, or such perception as was among the intelligences before the era of matter and natural light.

Man has a consciousness of his life and mind action distinct from the body, but he has inherited such a habit of contaminating it with the body that he scarcely knows how to consider himself a being at all except with the body. At best he seems unable to retrench his materialistic ideas. He will hold to the thought that his body is the principal thing, whereas it is the least part of his existence. Behold him in his independent mind perception and operation. He often finds himself thinking, comparing, meditating, calling up memories, constructing, planning, and in a hundred other ways of mind exercise with which matter has nothing to do. Because he is related to a subservient body of matter it gives no proof of his nonexistence without it, nor that he could not exercise his life and mind as well or even better without it.

How can it be claimed that all these processes can go on without perception? Is not perception the precedent? Is it not the nature of the mind first to perceive and secondly to revolve and consider the things of its perception? But perception implies eyes, ears, and touch of some kind. Suppose they are different from the senses set in the body, does that prove that they do

not exist? Verily not, for even those set in the body are only physical avenues of the sense perception of the life and mind. Within themselves they perceive nothing. It may be a great error to think that the life, which is the delicate embodiment of sensation, has within itself organs of sensation and a perception locally placed as in the body of man. Should it be true, however, it would not at all militate against the sixth sense in man that he has ability to perceive and reason independent of his physical frame.

Reason seems to force the conclusion that the true definition of the sixth sense of man is contained in the ability of life and mind action independent of the body in which they are clothed. It therefore appears that both science and philosophy have been made to walk on stilts because they have too stubbornly disallowed the independence of the mind. Materialism is compelled to remain thus hampered. Science and philosophy are too much saturated with materialistic ideas. There can be no halfway ground, and compromises are not progress. The life and the life's mind must not only be used, but must be enthroned in the thought, or else both science and philosophy must remain very much as they are to-day. Of course no one would have the world to grow chimerically speculative. But right reason would suggest that principles should be received that are as well warranted as many of those which are received in physical science and which are, on the basis of a guess, made the ground for structural science.

Now witness the operation of the mind independent of the body. And when attention is called in this direction there is meant a work of the mind in which the natural senses have no connection. It is also meant that the mind first had perception of the things it considers; and if perception, it must have a sense connection with the things perceived. If the five material senses are unrelated to the perception now in hand, another sense must be acknowledged to account for the phenomena of the mind's work. How is it that the mind is able to seize hold of the negative end of universal conditions, and yet is not content when such are called nothing? When thus cut loose from the natural sense connecting with matter, is it not struggling with sense perception after things with which the five senses have nothing to do? And does not the mind use the same or similar discretion, as when contemplating physical phenomena?

Physics says that darkness is nothing. How has physics found that darkness is nothing? Because, it says, when light appears darkness fades away or disappears. But what is light? Has it ever been proved to be anything of substance? But physics says it must be allowed to be something of substance to account for its phenomena. Is not physics at this point getting on dangerous ground? Is there not at least implied a doubt of its dearest child, the well-approved and long-cherished wave theory of light? Can the truth be established any further than that luminosity is a mere unsubstantial condition of nature through the consistency of existences? Of course light is a great phenomenon and presents to one natural sense of man much of both various and marvelous phenomena. But what of darkness? Is it not also a condition of nature according to the consistence of existences? But it is the absence of luminosity. That is true, yet it is an existing condition of nature. But the senses of man have no connection with it. Perhaps the thought had better take a rest at this point. Is not darkness a condition or thing of perception? If perceived, is there not a sense perception in man that bears relation to it? The eyes and the other natural senses sustain a relation to physical nature. Through them matter is magnified, if not glorified. To allow nothing beyond their perception is to be a materialist; to be a materialist is to be an agnostic, a doubter, an infidel.

It is the province of the sixth sense of man to begin at the negative end of nature and work toward the positive. In this way it follows the course of evolved nature which sprang by the force of something out of nothing. Since the five material senses are set in a material body, it is their office to reverse this order that is, to begin work with the material or positive end of nature and go back toward the negative pole. The sixth sense and the five senses have a proper place of meeting, and that is in man, who, when properly considered, contains within himself something of all from one extreme or pole to the other. He is the being who in his consistence joins the two poles together or compasses the whole ground from one to the other, for he possesses in his being from the veriest nothing to the veriest something of the things of the universe. He is the fit representative of all, and is therefore no unimportant microcosm within himself. In him are darkness and light, matter and mind, thought and reason, life and death, something and nothing. Indeed, the things that overstep matter and science and belong to philosophy, and which seem to lie out toward the border land of nothingness, are the dynamics of his being and as absolutely exist as his body.

A man thinks and then dismisses his thought. seemingly is gone forever, as anything else that is nothing of substance. But the next day memory bears the thought back and places it before him, and he thinks about his thought. He sees it as tangibly with his sixth sense as through material sense the natural eyes see the figure or forms of matter. Yet no one would claim that thought and memory are anything more than qualities of the mind—that is, they are not substance. But what does this signify? Does it not show that the mind takes hold of things that are absolutely nothing in their consistence? Does it not also show that there was a precedent perception, a sense that saw the nothingness. The universe is so constituted that it cannot help but show its physical reality and whatever of reflected conditions and images that follow; and man is so constituted that he cannot help but see them. In physical nature they are placed before his natural ways of perception, but in the immaterial universe they are fixed before his pure soul sense with certain glintings of them through the natural sense.

Order and precision belong to mathematical science. There is no random work even in its abstruse problems and abstractions. This science presents its images before the eyes of the soul. These unsubstantial forms exist in nature, and they are seen applied in the hoar frost, in the snowflake and the crystal. The labor of the mind in working a solution of the forms and images the soul sees is comparable to the labor of the chemist in resolving physical substance into its natural elements and of seeking out the qualities. The

chemist has before him a material substance; the mathematician, a reflection, a form, or image. The one can no more create the form or image than the other the clod of earth. They are both in search of the truth. They both see, and in seeing they deal with matter, phenomena, reflections, and qualities. Truth exists everywhere in the universe, and reflects its various forms and images. It cannot be sustained, because the chemist deals with matter and the mathematician does not, that therefore the one sees and the other does not. Is not the mathematician laboring as hard to prove the qualities of his image, or the truth it represents, as the chemist to prove the consistence and qualities of his clod of earth or any other substance?

But in the case of the mathematician it is called image-forming. It is to be hoped by this that it is not assumed that the mind can create. If so, it is denied. Man is a being created, and in no sense a creator. He can see, discover, and apply, and in his application be called an inventor. He can no more create an image of things than he can the things themselves. Images and all substance are things of perception rather than a creation. Man's soul and mind are given to him to see the conditions of nature, its obstructing substance, and whatever unsubstantial radiations and reflections may appear; not only to look upon and consider the physical, but also the metaphysical. Considering the independency of the life and mind in man, he certainly has sense perception for this great task, although he is made to go slow in contemplating the things perceived; the five natural senses connecting him with physical things and an intelligent or soul

perception for the metaphysical or supernatural. It is enough to know that something of nonsubstance exists in nature as a condition, a radiation or reflection, and that it impresses itself on the thought by some kind of perception. Man knows that he can see the light of day without seeing cosmic ether or the orb of the sun. He knows that he has a perception of different conditions or states in nature that are no substances at all.

If darkness is a condition of nature because something else is absent, it is not a proof that darkness is nothing at all; nor when light clears the world of darkness is it a proof that light is anything of substance. Darkness is certainly nothing so far as substance is concerned, and yet it is certainly a thing of perception, a kind of thing that the mind contemplates, and has cubic measure. The mind perceives that space in sunlight and space in darkness are things of different consideration; for space in the one instance has the quality of light in it, and in the other the quality of darkness; these qualities, being interchanging conditions or states of nature, are as much qualities of space as of anything known. Space does not change its quality of nothingness either in light or darkness. Yet space, like light and darkness, has cubic measure that is, it has the measure that is applied to substance and without which no substance can exist. But space, which is nothing, can be occupied by something else which is equally nothing, and there may be a change of appearance in regions of nonsubstance, and the mind perceives and considers them.

The idea too generally prevails in scientific circles that there must of necessity exist a substantial connection between the soul of man and the things perceived; that as the soul is a substance and the things seen are obstructing substances, and the body with its fixed senses is a substance, therefore some kind of substance must intervene all the way to the object of perception. This is certainly an error; for nature is filled more generally with the radiations and reflections of substances than with the substances themselves. These unsubstantial radiations and reflections are often perceptible when the sources from which they spring are not.

CHAPTER I.

MATTER.

I. Matter is a scarce quantity in the universe. Ordinarily and with casual observation we do not think this way, for the earth seems large to us, and we thoughtlessly and naturally think there is a great deal of matter; and really in one sense there is very much of it, much of it even in the earth, and much more of it when we come to think of the innumerable stars which hang out in the distance. But in truth we get better ideas of quantities by measures and comparisons. Man, with knowledge of distances, has only to cast his eyes toward the heavens on a starlight night, and he will get a general conviction of the quantity of matter in comparison with the sphere of space through which it is distributed. Those specks of light or glowing flame, apparently the size of fire bugs or burning lamps, are no more in comparison with the immensity of space than so many balls of their apparent size set on the rim of the earth's atmosphere five hundred miles away would be when compared with the earth's magnitude. comparison hardly equal to the fire bugs which fly in the earth's atmosphere. Really it looks scarce, and there is not much of it after all when we come to compute the distances by which the globes of matter are separated.

When we come to look upon the spheres of matter, and compare them with the spheres of contiguous and allotted space, the matter of the universe, in the contemplation, is reduced to the most insignificant of things—so much so that its chief worthiness does not consist in quantity so much as it does in its service, being made a foothold and supplying the wants of the physical beings that have appeared upon it. The spheres of matter, in the comparison made, are but lost specks, with only the meagerest acquaintance with the nearest though distant neighbors. The matter of the solar system, so far as it is known, occupies far less than a sextillienth of the space allotted to it. There are on computation not less than ten million cubic miles of space allotted for every cubic inch of matter in the solar system. By analogy this is the approximate condition of the universe. If the matter of the solar system were blotted out by putting it in general diffusion, it could not be discovered, nor would it produce dimness in any fixed star. The matter, dust, the something or nothing, whatever it is or would be in such attenuity and diffusion, is, in the mind of philosophy, considered to have been the once condition of the universe. Even now there is evidence that there is more or less uncondensed matter in space. Even granting that there is more than is gathered in spheres, still it is scarce.

Concerning the uncondensed matter now diffused through space, it seems that at least one of the several opinions must be assented to: (I) That matter is more or less again diffused in space after having served a purpose, being ejected from existing or once existing spheres; or (2) from some cause it has been slow of condensation; or (3) that the prin-

ciple of gravity did not occupy it universally at the same time; or (4) that the force that made it appear is still in operation. While at least one of these seems to be a necessary acknowledgment to account for uncondensed matter, all may be true in a degree; yet (1) and (2) of these opinions contain the thought of greatest doubt.

God speaks and it is done, but so far as things have a relation with time, it may not be done with the suddenness that some are disposed to believe. Everything indicates a gradual process, and there is evidence that the physical spheres are still growing. The period of man's existence on the earth is too short, and the tables of his observation and his period of computation cannot furnish data upon which certain great truths could be established. Could he have been on the earth with present intelligence from the first created things, his compiled observation would be in great evidence.

But let us turn again to matter in its quantitive comparison with space. Indeed, it is so scarce that if the principle of unity holding it together had never taken hold of it, and the principle of matter had, therefore, been left in general and equal diffusion, it could have no more been manifested to such a being as man than any existing intangible and unseen principle of the universe. There would be less evidence of its existence than much that is unseen and about which there is disputation. Matter could present no phenomena, and therefore in a physical sense could not be an object of thought. Really, there would be no matter in the human conception and idea. Yet there would be no annihilation. It would only be the work of changing the condition of matter. The whole principle of mat-

ter, though unseen and undiscernible, would still be in the universe. Nor would this stand against the argument of St. Paul, who was not only a religious and ethical teacher, but learned in philosophy. He says: "The things which are seen are not made of things which do appear." For the unseen principle of matter becoming subject to a force that produced its unity and observable form, the unseen would become manifest and the things which would then be seen would be made of things which did not appear.

II. Matter is the dead substance of the universe. What is meant by this statement is, that it is not only destitute of life and energy, but also that it is as absolutely helpless as any dead carcass, and can within itself give no sign of strength and energy which belong to or are attributed to the positively active and living principles of the universe. It is not like a thing newly born or created. It bears no characteristics of conceivable ancestor or creator, inheriting neither life nor sign of energy. Dead things and things that cannot at least give a sign of energy are neither created nor born. Gestation, growth, birth, creation, all imply life or energy in the being that nourishes and makes, and the productions of that life or energy under a natural rule most certainly must inherit in some degree a similarity of life and energy. Helplessness, death, and decay are the results of mutation, a withdrawal of some force, its mutation and destruction. The deadness of matter, therefore, is a sign that it is not in its original state of existence. Through what scenes of mutation it has come to its present stage and consistence is an obscure history; yet when formed as it is it was like a new creation, is called a creation, and is really a creation in the

sense of rendering the "unseen" a visible thing, though it be a dead universe so far as matter is concerned.

The existence of matter implies previous mutation for its production, and indicates that by some indefinable evolution, through age or by collision with some more powerful principle, it, in some unknowable way, has made its appearance as now existing. This is not meant to put any discount on the almighty Mind and Power—for he is recognized and acknowledged—but it is to indicate that he is not unmindful of means in the advancement of his purposes. reasons may be presented as the modus that gave origin to matter in its visible sense. First, through the destruction of the principle of matter as it once existed, a change was wrought, and unresisting deadness produced, but not annihilation. It must then have become the prey of the forces of the universe. Whether it would ever, in its diffusion and invisibility, be touched by any depended on their nature. But a force existed, or, if it did not exist, was made for the purpose and did take hold of it and give it condensation and visibility. Thus, secondly, the unity of matter was established by the force commonly called gravity; not a unity by any force, power, or energy in matter or of matter, for it is dead, but a unity established by some principle that was without coming within, occupying or controlling matter into unity whereby it is made manifest and tangible; took hold of it and gave it form and order, even as other energies and life take hold of it, giving the form of a crystal, a tree, an ox, or a man. But in the process of making the different things of matter the unity is broken and set at naught, for the forces that make new forms or beings of matter appeal

not to matter, but to the principle of it for organizing new bodies. So matter must, as we perceive, be resolved into its principle, and out of this principle energy and life gather the substance of new bodies.

In all the universe only this category of dead matter is a visible obstruction. It is the only thing obstructively in touch with every human sense. It blocks the human pathway in all directions. Yet it is the only channel for knowledge so far as unassisted man is concerned. Its phenomena lead to other discovery. Man must pass through it or stumble over it in every quest for enlightenment. He sees it in its helpless death, he beholds it in his inertia, and wonders when he sees it formed into spheres with great space between, and wonders more when he sees the spheres in motion with regularity and exactitude. Incomprehensible. None of which, as he is driven to acknowledge, matter could ever have produced. He wonders as he thinks of the plastic hand that forms the crystal, the quartz, and a thousand other things he would like to understand. And when his thought reaches out into the vegetable kingdom and still farther into the animal kingdom, and topmost of all he sees "men as trees walking," he is amazed at all that goes on and shows forth through the phenomena of this body of death. He looks on matter, goes through it in his thought, stumbles, and perhaps falls in his bewilderment, not knowing, but with great desire to know the truth of all these things. He confesses to energy, force, and life somewhere, but how to place them in their proper relations to matter is his first and great question. Can he place them in matter or declare with consistency that they are of matter? Verily not, for matter is

helpless. It cannot act, but must, in order to give it its various forms, be acted on and handled. If matter could act in simplicity, it might be able to act in complexity. If instinct be attributed to it, then may it not have mind? Such a thought pursued would lead to a deification of matter, and to it should be rendered human homage, and to it should be sung hymns of praise. Yet how untrue and how unphilosophical!

Where, then, must man place this energy, power, and life? It must be placed without as something that comes within; something from without that comes within and produces the order and harmony from the listless crystal to the man of reason; something that can take hold of matter, resolve it into its former principle, and out of the "unseen" construct a new and visible body. But this energy and power cannot be seen. No; nor can the resolved matter be seen with which they work in constructing new organisms. They are both in the dark so far as man's sight is concerned. It is work in the dark, out of the reach of man's eye and intellect. He can only know the work is done and look upon the new body when constructed. But this energy, force, and life cannot be seen, nor the motion of its work, any more than gravity itself. Power, force, and life have never been seen, and perhaps are forever sealed. Yet they are in all nature, and are the dynamics of the physical universe, not of matter but in it. It seems almost a proper conclusion, in the transmutation of things, that whatever loses its force or power becomes, if not changed into some other force or power, a dead thing to be handled and utilized according to will and adaptation of other forces. That matter is the result of decayed forces and energies.

Everything material that is enlivened is taken out of the body of the dead matter. The principle that comes within it is the plastic hand, the energy, the real life; the growing or mobile body, the apparent life. Quoting the highest authority, with a change of only one word without changing the sense, we read: "Of matter thou art, and unto matter thou shalt return." This is true of both the vegetable and the animal kingdoms. Only the human soul escapes. So far as material things are concerned, whether animal or vegetable, they rise from the universal grave of matter, and by an irreversible principle return again. power, energy, or life may get into this or that clod of matter, it is only temporary, for this vast field of death finally and always claims its own. Whatever is not of matter, but from adaptation, purpose, or end, has become entangled with or associated with organisms of matter, will have perpetuity or destruction according to worthiness and utility. Nor can it be determined that gravity is to be an everlasting principle. The epoch of matter may reach an end in time. transmutation of things it may as easily disappear.

Granting that matter is the result of transmutation, that by some unknown evolution it has resulted from the decay, domination, or supersession of some formerly existing principle, which was not matter as man now beholds it, it is reasonable to presume that the decayed principle was touched and affected in all its parts at the same time; and that matter, therefore, appeared or began to appear at the same time. This accords with Moses, who, in speaking of the creation or evolution of the universe, says: "In the beginning God created the heaven and the earth."

As to the subject of the creation, it is to be presumed that the material universe is coextensive with the principle from which it was evolved; and that the principle of matter in its ancient energy and utility was of an attenuity that rendered it invisible, a mere substance; but that in its wreck, ruin, death, and confinement to the present narrow limits it became the visible matter of the universe. It is upon this hypothesis compressed to within less than one sextillionth the space it once occupied. Now take its substance, whatever it is, and confine it by force in such narrow limits in comparison with the vastness of the field it occupied in its energized nature, and it is very likely to become, not only in conception but also in consistence and likeness, if not in quality, very different from what it was.

III. Matter seeks unity. If left alone in its dead and helpless state, occupied as it is universally by one principle, it would all go to one place and would all be gathered into one great sphere or globe. Unaffected by any but this principle alone, it would know nothing but straight lines converging at one common center. But even in this condition it would find no absolute rest, because the force that occupies it and controls it would place every part of it at the center, which is impossible. Leaving off the thought and idea of law, which is alien to dead matter, there would be weight without the motion of gravitation, a weight proportioned and inversely as any of the parts would occupy a place from the center. Since matter is dead, as has been assumed, it has no power over itself, in itself, or over outside things. Hence the weight ordinarily attributed to matter becomes manifest and evident, not

from anything in matter or of matter that has power or can pull, but from some principle that occupies it and controls it as a whole and seeks its general unification. It is no more of matter than the principle that controls the growth and use of the human body is of the dust of the ground or of the human body itself. Nor is it necessary here to multiply words on law, on instinct, force, molecular action, will, mind, and life. It may be well to state, however, that instinct and law are nothing more than definitions. They refer to rules of action and forces, without possessing the least energy within themselves. They are not substance.

The elementary units in the composition of matter, their peculiar affinities and repulsions or any other properties and qualities discovered or remaining to be discovered, do not destroy or affect the principle of the universal unity and the disposition of matter to be universally collected into one place and into one body. The controlling influence or principle that occupies matter as a whole, when restrained in its effort to establish a general unity, will establish as many secondary unities as there are divisions of matter held in restraint by some principle, force, or motion. The same principle that pervades the whole is in all the separated parts. It is only defeated here and there, but is never shorn of any of its strength. It recognizes distances, it is true, but no one in the light of discovery, mathematics, and science can declare that its strength is altogether lost in any part of the universe.

IV. Matter is in an abnormal or unnatural state. As a dead body in the universe it is the great helpless entity, unresisting, and therefore subject to the forces that occupy it, or in some sense become entangled with

it, causing man as he looks upon its phenomena to be deceived and to attribute to matter what should be attributed to principles that have gone into it. In the deadness of matter, in order that it might appear out of its former principle, some force or other principle had to occupy it and establish its unity. This is the principle that would gather it universally into one place. It seems in its nature to contain the thought that the universe should be cleared of its matter, or at least the matter should be all put to one side and out of the way. If this principle, though not of matter, must occupy it in order that a dead principle of the universe might appear and therefore be reduced to the smallest compass and put to one side and out of the way, its natural state would be the condition or direction this principle would give it. This would be, as already stated, straight and converging lines to a common center. Dead matter would not at all be responsible for this motion and action, but the principle in whose hand it was caught. It is not a concern here as to what acts on that principle or from what source it derives its strength. It is thought best to keep the subject as clear as possible and not add to its complexity by improperly intruding other matters.

But the matter of the universe is not disposed and concentrated under the influence of a principle that occupies it universally and which was concerned in giving it visible origin. For its unity and regular order have been disturbed. It has been caught in other and stronger hands which checked its regular and natural course toward centralization and formed it into seemingly an abnormal but orderly and beautiful arrangement. Indeed, in the contemplation, matter as it now

exists and is arranged strikes the intelligence of man with surprise and wonder, and in the pious mind almost provokes the spirit of adoration. The way in which matter in the various sections of the universe has been caught up in its divisions and has obtained an irresistible balance through the effect of regulated distances and motion, so that the principle which would bring it all to one place is no longer efficient, awakes not only curiosity on recognizing and contemplating the forces that have taken hold of it, but also a great wonder as to what hand was in those principles when all this was wrought.

The dynamic forces of nature are unseen, and it is impossible to know in what quarter they are strongest. Their presence is discernible only in their connection with matter. Knowledge of their presence, strength, and ways can be gained only through the phenomena of matter. What they do, how situated, to what extent they dwell, what their attributes or characteristics outside of matter, what their uses disconnected with matter, where strongest, or whether equally powerful universally, are questions speculative and can be admitted only as they serve the most reasonable purpose in accounting for the present mechanism of nature. It almost seems that the principle recognized and known as gravity, by its nature either before the physical worlds were formed or at least about the time they were formed, gathered itself into nuclei in places just as numerous as the globes of matter have appeared. In this way there were centers of pulling force on diffused matter that gave it present construction. This idea implies regular order in construction and maintenance; giving precision and dispensing with

the capers of chance that will otherwise creep into the thought in the construction of the universe of matter. When one thing pulls on another it also seems to pull against it. But is it always true? It must be true where there is an exercise of opposing will and power. But take it the other way, helplessness at both ends of the rope. Which end pulls? Is there any pulling? Can there be any? But when there is force at one end and helplessness at the other, the helpless is made subject to the force. The nuclei of gravity were central forces that pulled upon diffused, helpless, and unresisting matter and within proper radii of influence brought it together and gave to it, as may be presumed, its own motion and order. So that the precision or law attributed to matter is rather the precision and rule of the forces that control, and matter yields to those forces without resistance.

V. Matter is without law. Law, as applied to the spheres or globes, can be no more than a word-name for their motion, regularity, and precision. Anything that cannot act for itself cannot be under law or have law. The force that transfers apparent law to matter exhibits its own law and may be discerned through the phenomena presented by matter. A man raises his arm, but the arm is not raised by a law of matter in the arm, although the arm is a member of the living body. The arm is raised through the influence of life, mind, and will. In point of time the physical act must be subsequent to the metaphysical. In this relation the law, whatever it is, must belong to the metaphysical department; so that the physical acts of man appear to be but a repetition or duplication of the life that is in man. Law is of a higher source than dead matter. It

belongs to the realm of things that know no delay, where no object can brook their precision, where nothing can clog or hinder. Not even matter can interfere, but is carried along as though it were not; and when matter resolves, meets, and passes with precision, man is disposed to think of law in it and attribute law to it. But it is the precision and law of the principle that take hold of and use matter.

There is no fickleness in the metaphysical forces of nature. There may be sports and breaks in material phenomena, but not in the forces themselves. are steady and do not change. Law can properly belong only to such a realm; not a law over them, but law in them. Law implies perfection among things that cannot speak, perfection in revolution and perfection in time. Whatever load is given to a principle or a principle is made to assume perfection is required of the principle with all its load. The principle is under law or is of nature that cannot be otherwise. From this is borrowed the idea of law to man. The law may be higher than man, but it means that he shall approach perfection until he shall be in harmony with all good. It does not mean so much that he is under law, as that law is over him as a master to correct, lead, and guide. When he reaches perfection, if it be granted that it is possible, the law that was written for him on tables of stone or on a papyrus scroll is virtually blotted out, for the law becomes written in his heart, in his mind—in other words, it becomes his nature.

A mere voice to matter without the force of intelligence, with or without some other force, in either a primary or a secondary sense, leaves it as it was. It

hears nothing, is touched by nothing of power, and, therefore, yields no obedience. Matter will be affected only in the degree of the constancy or continuousness of force. All chemistry shows this to be true of all the different kinds of matter now discovered and tested. All life and life action is evidence of it. The phenomena presented in chemical processes do not show a battle of affinity and resistance in the different kinds of matter, but rather a battle of unseen forces. So, then, the idea of law, whatever may be understood by it, is not in or of the matter, but in the forces that have taken possession of it. These forces in their connected sense are the responsible agents, either alone or in their connected relation to other principles, for all that matter is made to do.

Between any prime voice and matter, unless deadness is immediately touched, there must exist an established agency of force, or else the deadness will remain forever untouched and unaffected. The truth reaches from earth to heaven, from man to God; for even that high One uses agencies and forces for the accomplishment of his purposes. It is a force rather than a voice, or rather a constancy of force in company with a continuousness of voice. The Almighty not only commands, but also upholds. This indicates continuousness of his presence or, if not of his personality, at least of perfect and constant forces of his creation that can be trusted, showing a perfected establishment that supersedes law in the dead world and makes it unnecessary. If law in the dead world means a voice or to show a condition, the word is misleading; if it means an influence in and of the dead world, it is not true.

Not knowing what may have been the once condition of the universe, man can look upon it only as it is. And in looking upon it he beholds life and death, motion and rest, force and helplessness, and through it all the hand of mechanism, even in the territory of chemical destruction. He sees forces at work both building and destroying, and with the same strength in all ages. He knows not the work they do among themselves, for they are too deeply metaphysical for his own mind; but he does see them go down into the dead world, lay their hands upon helpless matter, and impart to it in visible sense some of their own characteristics, revealing as far as is possible through matter what they are, their unabating strength, their order, their constancy, and their precision; restoring, in the midst of many a wreck, to utility again according to the will of a Final Cause. But in all this work law is no more to be attributed to the dead world that is handled than to the material used by mechanics and artisans in the construction of their buildings. It is only through matter, or the dead world, that man is enabled to get knowledge of the forces existing in nature, and, if so be, their laws. But really, if it be granted that these forces in their several departments are constant and perfect, they are incapable of change, and therefore law would be unnecessary, a mere imagination of the mind, a mere statement of natural conditions.

It is said that the fall of an apple awoke the serious thought of Newton, who was at the time in a meditative mood. In that meditation he discovered a principle and gave to it the high-sounding title of law, the *law of gravitation*. But what was it Newton discovered? He saw that material objects pull upon each other. But

did he see that they pulled upon each other by a force connate in matter or of matter? Verily not. He only spoke of matter and gravitation in matter. He explained nothing as to how this force dwelt in matter, nothing as to whether or not it was of matter, nothing as to whether it could exist without matter. He made a great discovery and applied it universally in its mode, rule, or law of operation, and blessed humanity with great truth and knowledge. But he did not grapple with or attempt investigation of the principle of gravitation beyond the effect it has on material things. He left the inference, and others have followed and pursued the same thought, that force is in matter, of matter, connate with matter. But is not matter dead? Is there any force or power in it? Can there be? Is it not reasonable that there should be helpless things in the universe to be exercised and controlled by existing forces and powers? If not, what conception can man have for the necessity of force and power anywhere? It would imply battle and collision with each other, uncertainty, danger, disaster, ruin, and destruction. It must be that the forces of nature are perfect, and therefore arranged in harmony with each other. Matter in its helplessness, handled as it is altogether by forces, may here and there hold out signs of its weak-It may tend this way or that way and show that it has no defined path of its own making; and, for all man knows, a species of deadness may have entered into the unseen world, even in the realm of intelligence. It matters not. Wherever any grade of deadness appears the perfect forces seize upon it, concentrate it, imprison it, and control it. This is the

self-preservation of the universe. Not that there is no God, but that God has made them so.

The idea of law has so prevailed and has taken such root in the thought that matter cannot be looked upon as a whole, or in any of its various relations, or in any of its particular kinds without admitting the idea of some cognate law that controls it. This verily is the advancement of a thought into force, or a voice or a law into a principle; whereas a thought, a voice, a law are as nothing in the dead world. The highest voice may speak into the dead world, and to the dead man, call him by name, and command him to come forth living again; but there is more unseen and unheard than in the mere command. The voice is spoken into the dead world, and in the eyes of all beholders to the dead body, but a mighty principle must act in the living world and put life back into the dead. Here a voice is heard, admittedly the highest, yet force must be admitted also to get anything out of the dead world. A life must go out of the living world into the dead to reanimate the dead matter. A voice dependent on the air or any other medium is but an expressed thought or intention. It is the action, the energy of principles in immediate connection, and not the contactual result of voice or law. Nothing can be declared self-acting absolutely except the uncreated. The physical spheres and unintelligent forces are but structures placed in the order of their being, in rest or motion, and unable to do otherwise than is done; for in them is neither mind nor will. And since in them there is no mind and will, there can be no confusion, no hastening ahead, no getting behind, but perfection in being, and therefore harmony and precision. Law

as a word applied to all these things is but a word that expresses their order, harmony, and precision. The only possible way of changing this harmony and order must be, in man's conception, an exercise of the power that establishes them.

VI. But there are different kinds of matter in the earth; not in the sense, however, that the principle of gravity is differently affected toward them, but in the sense that they are differently affected toward one another. Gravity remains the same toward them all, claims them all, influences them all. But other principles have intermingled themselves with matter and exercise an influence on the different kinds of matter according to affinities, repulsions, or indifference. In the exercise of these forces man's knowledge is gained mainly through observation and experiment of the earth's matter. With such introspection and examination man obtains a data upon which he may logically infer concerning other spheres of the material universe.

The matter of earth, considering its different kinds, is in an unregulated state and out of all harmony with itself, so much so that the earth is incapable, as a whole, of any dynamic influence or power. According to all indications, it must forever remain in its helpless deadness unless some evolution, if ever and if possible, puts the different kinds of matter in proper proportion and place. Till then, and not till then, can man conceive of any indwelling energy in it or that it can possess any dynamic influence. Such an arrangement of order would seem to indicate the first step toward preparing it for dynamic influence, even if then it could be possible. If it be lawful so to speak, in order that the earth may be lifted out of its deadness, as a first step,

it needs all its ribs in place and every other part. This would be very different from the irregularity of the present disposition and arrangement of the different kinds of matter which under the influence of certain principles are, as it were, struggling for their respective unities.

An idea of design will intrude in the seemingly reckless manner in which the different kinds of matter are distributed and commingled. But without a word here in that direction the earth, in the eyes of the beholder, is formed as any other dead and wasted thing with intermingled constituency of parts and kinds of matter. Allowing that with more regularity in the different kinds of matter it might still have been equally productive, but, perhaps, with change of forms, habits, and modes of life, yet in view of the uses which as a whole it subserves, the present irregularity and arrangement of the different kinds of matter are for the best and even necessary; not only that the physical universe might appear, but also for the best development of things that have appeared upon it.

It may be that in growth and the interchanging work about the different kinds of matter, the matter itself, by some force or energy, is resolved back into its unseen substance, and that from this substance, under selection, the materialization is again renewed in order to produce particular forms of matter. Any way that mysterious principle causing growth, unseen itself, must work with the invisible in order to produce the visible in the different forms of matter in both their simplest and their compound relations. It may be that the substance of the earth, as it once existed unmaterialized, possessed then substantially all

the different kinds of elements that belong to the present materialization. But with such a grant of opinion, whatever may be the irregularity of the different kinds of matter in the materialized earth, it seems that it must have been in orderly arrangement, and all in proper place in the unseen substance of matter. Since they contain within themselves the rule of mathematical precision, all dynamics must be in regular propor-Since fluorine, as an example, exists as an element in the composition of the earth, it not only shows its regular proportion to certain other composites, but also indicates that its quantum in the earth, as a whole, has a proportion to every other composite element and to all matter that the earth contains. But from this it would amount to no more than hypothesis to conclude that proportion must, in order to produce the best effect, be the same in both substantial and materialized matter. That is to say, that the quantum proportion in substance is or may be different from the quantum proportion in matter. This is at least a conceivable way, that where there was energy and force once, by mutation the energy and force cannot occupy the changed body. That is to say, that the forces that may have occupied the substance of matter were different from the forces that occupy and control matter materialized.

That which has been stated of fluorine may likewise be stated of aluminum, sulphur, mercury, or any other composite of the earth's matter. These different kinds of matter or different elements of the earth's matter are simply out of place or are in a condition of great irregularity and confusion. The very condition or confusion of the elements of the substance of the earth, or of the different kinds of matter, indicates that, in its

helpless death, it is the wreck of some former existence. If it is allowable to use an analogy, it may be said that no bone is in its place, no tissue, no nerve, no joint, no anything as a sign of energy. Yet the elements of a former state remain, disconnected, disordered, and therefore shorn of strength, as anything else of which man may conceive lying in death and decay.

In every material existence, whether of life or death, organic or inorganic, there is an abundance or a scarcity of the different kinds of matter, and all proportioned to the existence, whatever it is. Because all matter is not the same kind of matter. "all flesh is not the same kind of flesh." A wonderful number of organisms appear because there are different kinds of matter. The variety is seen as though the different combinations are equal to the product of the elements put under the rule of permutation. Yet in each organism there is more or less abundance and poverty so far as the natural elements of matter are concerned. Yet the elements are more securely in proper place than in ordinary earthy matter. Yet all these organisms are in a condition of decay and death but for the repairs constantly made. Whenever any kind of matter has served its purpose or becomes exhausted another of the same kind takes its place, and this is repeated until the end of the organism, when it becomes as other earthy matter, where there is no regular rule in the application of the different kinds of matter.

That which is true of the abundance and scarcity of different kinds of composition in organisms is likewise true of the earth's great body of matter when considered as a whole. Some of the elements are exceedingly scarce, as chemists are well impressed. Per-

haps some are so scarce that they will never become known unless by the merest chance. They are here in their respective quantities with the visible earth. They are very much out of the orderly arrangement in all earthy matter, of which their orderly arrangement in all organisms is proof. A disarrangement of their regular order in organisms produces at once sure signs of decay. When life or force is inadequate to the task of keeping up this regular proportion or to perpetuate it, decay and death become a natural result.

Taking the earth as a whole, it may be that the different kinds of matter once performed a better office than now. The very knowledge which man has that there are different kinds of matter is, when meditated upon, supremely indicative in his own thought. Why all matter is not the same or more nearly the same, or why matter is not of greater variety in its kinds, is a thought that is not limited or concerned with its present application to existing organisms, but reaches, though obscurely, into an antedating period when matter was not of its present consistence, nor could it serve its present purposes of utility.

Granting a former but not eternal existence of the principle of matter, which is by no means the least of probabilities, the different kinds of elements which gave it useful connection and strength must have been properly placed. The material forms which man beholds do show utility of orderly parts and connection by properly proportioned elements. Should all matter become invisible, into which condition particular matter must be resolved before there can be growth of an organism; should all matter be resolved into the

invisible principle of itself, may it not be that by its freedom to have its parts more easily arranged into other and better form it would possess strength than now? Out of the resolution of matter into its substantial state growth and new organisms are produced; at least this seems the conceivable way. It is the process of form creations from substance. Then does not this suggest that energies take hold of the substance of matter, of substance uncondensed, or substance of resolved matter, and out of it construct the myriads of forms which appear? If in evolving the creation coarse matter appeared out of a substance, may it not be that all the particular forms of it are gathered from the same substance? Accretion and growth are processes as refined as they are mysterious and invisible. As applied to this process, discourse on molecules and atoms is not fully satisfactory.

VII. Man is not altogether without evidence that there is a limit to the matter of the universe. Yet the earth and—may it not be said?—the whole solar system are situated far from the nearest encompassing boundary. Man may turn his eyes in any direction above, and it is matter, and matter beyond matter, as shown in the twinkling stars. And when he calls the telescopic lens to assist his vision, there is no relief in any direction, for it is world of matter beyond world. Even imagination may reach out until arithmetic becomes confusion, and still there is no relief, for nothing is found or known of the boundary. Unless some data can be found upon which reasonable opinion may be constructed, man is forced to exclaim: "Space and worlds of matter everywhere and of equal extent!"

But the principle of the unity of matter affords some

evidence of its limited existence. It would all gather itself into one place. This is its first and universal tendency. It does not now fill all space, but only a small part of it; to so speak, just a few points in space, as the globes of it do show. Were it free from all counter action, and were it at liberty to be controlled only by the principle that seeks its unity or, as is commonly called, gravitation, it would in time conceivable gain and establish its unity, thereby disestablishing its interspersion and manifestly be very limited in its extension. The influence of drawing it together would be felt everywhere, and the strongest pull would be at the common center, or on all the numberless lines that pass through it. It would thus approach the center of gravity for the reason that more matter in relation to any of the parts would be on these lines respectively. If such a principle prevailed unembarrassed in matter, whatever may be the ideas of the extension of it in the universe, one of two things must be affirmed: First, that matter would be affected in the remotest parts of its existence and take up its line of march toward a common center; or, secondly, that some of it is too remote to be touched and made sensible of this principle of unity. But this latter affirmation would be untenable, for there could no more, in human conception, be an end to the influence that would bring matter together than an end to space itself. The only possible end to the influence would be the end of matter, the end of the existence upon which the principle or influence lays a hand, takes hold and grapples. Under such an influence matter would be compelled to leave its remotest border and get within a narrower compass. Hence in view of the existing principles of unity in matter, the conclusion is reached that at least a sign is given unto man that the sphere of matter is limited, and that, therefore, there is a boundary to the physical universe.

But further, every material globe of the universe has its boundary lines limited not only in component material, but also there is a limit to each in the sphere of circular motion. Man is able to see a part of what may be considered the whole, and indeed a great multitude of parts. These are all filling offices and places in the universal system of matter. They are graded with very unequal quantity and magnitude, with unequal but unchanging periods, with nearer or farther proximity, with a perceptible influence or sense of each other's existence; so that what man sees may be regarded as parts of a whole system which he becomes able to apprehend, a system with center and circumference, a complex system that has a boundary all of which is impossible if there is no limit to the interspersed matter of the universe.

Man can have no conception of a limit, such as eternity, a center and circumference of space, or anything else which he conceives to be illimitable; nor can he have conception or reasonably judge of things that never show him any of their parts and never exhibit to him a sign of something in a great system, the connection it holds, its importance to the system, the office it fills, and the work it does. But in the material universe each part performs an office, each part is a recognized function of the whole; and if a part is recognized as needful rather than perfunctory in its relation, the material universe is composed of parts, and these parts, taken together, constitute the

whole; and if each part is limited, the whole, whatever its extension and multitude of parts, must likewise be limited in extent to the quantum and distances of the parts.

VIII. The age of matter, or rather the age that it has been gathered in spheres like the earth, is a great question. If it can be determined with any good degree of exactness, it would be a settlement of much If matter is eternal, then materialistic disputation. philosophy is planted on a sure basis. If even the substance of it is eternal and has at some period been materialized, then materialism or-may it not be said? -pantheistic materialism has the victory; and, if established, debate has come to an end. If matter never made its appearance until six or eight thousand years ago, as some have conceived through a misunderstanding of Moses, then indeed matter is of very recent origin.

The question points either to the eternity of matter, which implies its self-existence, or to some point in time when its existence began. Either the one or the other of these propositions is true. The former of these propositions suggests a materialistic philosophy which produces the denial of an intelligent and all-powerful first cause; and as a sequence, modern skeptical evolution has followed; and evolution, it is to be feared, rather impatient and prejudiced. Human experience and observation teach man that matter now exists; that, although it is not well known, it is the best known substance of the universe. It speaks to man from every quarter and invites him to look on it, handle it, examine it, analyze it. In its helpless deadness it is incapable of any art or device

that would deceive. Even the other worlds of matter in their distant circuits look down as shining lights, telling man where they are and affording all possible assistance for his help and investigation.

But man must look to the earth for his greatest data in forming judgment and coming to a conclusion about the age of matter. Yet, when he looks upon the earth, he may have a conception of the existence of matter without its being formed into globes. But the first step to be taken in the investigation is to look upon the earth. Take the earth as it is now; and if any one thinks that the period of the earth's existence tells the age of matter, he has made a point toward a correct conclusion. The earth bears the marks of age even of long existence, but it gives out no data upon which it may be reasonably affirmed that it is of eternity. Allow to geology all that it has ever claimed, to paleontology all that it has ever produced for consideration, yet they only point to sections of time, one section preceding another, but none to infinity, none age-lasting.

If the age of matter be postulated in the nebular theory of fire dust and allow that the earth and all the worlds were thus formed and originally in great heat, it is needful, even in that instance, only to allow sufficient time to cool into the present condition and temperature. The argument for the eternity of matter would be contained in the fire dust of matter, if not to some anterior date. But this class of argument leads to infinity, and therefore is worthless among all mutable things; or rather may it not be affirmed that existing things subject to mutation are creatures of time, began in time, and may cease existence in time?

Nothing is of the highest concept but the unchangeable, and therefore the eternal.

If any one looks upon inorganic matter, he sees nothing in its compound or in the changes wrought in it that indicates to his mind anything more than time and age. If he looks upon the different kinds of matter as pure elements, or in their complexity, there comes no voice of their eternity. If he looks down into the earth and beholds what has been wrought through slow processes or by cataclysmic action, no voice salutes the ear of understanding except time. If he looks upon the tops of mountain ranges and considers that the plains of the earth were once on a level with these, he has to think only of the effect of waters and the erosion of time to find an answer. He may conceive that that which was may return and be again. If he looks into the first fossiliferous stratum of the earth, he is only counting in the time when they lived, grew, sported, and passed away. If he looks down through the remains of all that once lived upon the earth, down through the solid crust into the central livid mass, he beholds only a process of cooling, and speculates on time, when it will all be finished.

When we look upon matter, so different from empty space as we view it, so different from other manifestly existing but invisible things, so different from and with so wide a gap between it and all else of which we have or may not have conception, and of which we can know only in part, we become prone, in our short vision and prejudiced understanding, to attach to it more than its proper share of importance among the things of the universe, and allow to it powers and

a reverential age beyond measure. But the time is at hand when, through the enlightenment of the understanding, no knee shall bow to it for evermore.

When matter is looked upon as the weakest and most helpless thing in all the universe, within itself destitute of all force and action, always subject to the forces that gather about it and in it, ever changing without any resistance or effort to maintain a constant form, always being but without strength, just anything except annihilation—we may say when we look upon matter as such that its importance and existence as a thing in the universe become of lower estimation. The thought will recur that, if it was never capable of being a producer, it must of all things have been produced; that there was a time in eternity when it was not, and a later time when it appeared. If it should be argued that matter is not now as it once was, that its present form and appearance have resulted out of its former principle, it would be of no weight in arguments to sustain the eternity of matter; for the argument made to sustain eternity would allow in the eternal thing the principle of mutation, which is self-contradictory. Therefore there exists the strongest ground for believing that the globes or any other conceivable forms of matter in all the universe had a beginning.

If we look upon matter gathered into globes, but in conceivable diffusion, we are forced to look upon the same weakness and deadness that are in its present nature. It could never have constructed itself as we now behold. A dead body cannot move itself; helpless diffusion cannot construct. Matter has obtained its present frame by the action of forces that

took hold of it. Its stability in its present construction and arrangement is altogether dependent on the constancy of the forces that hold it in hand. Should they desert it altogether, it is as conceivable that matter would become nothing as to be anything whatever. If once in time forces took hold of matter and held some relation in its original manufacture, it gives no proof that they will maintain their constancy forever. They may be feeding on a principle that man knows not of, and which may be subject to exhaustion. Then may come that inconceivable end beyond the range of human thought, the end of an old and the beginning of a new epoch in universal history.

But, referring again to the age matter, the first conclusion at which we arrive is that it is a creature of time. Moses treats it as such in giving an account of the manner in which the worlds were framed. Referring to matter, or to the uses made of it, he says: "In the beginning God created the heaven and the earth." He does not declare whether or not that was the beginning of matter. But man is made to confess that it was the beginning of those forms of matter that exist at this day, so far as the material spheres are concerned. Nor does that inspired writer say how modern or how ancient that "beginning" was. From his statement there can be drawn no positive logical inference as to years or cycles of time. was not concerned with date or philosophy, but with a great truth. Therefore he acknowledged and taught by inspiration that "God created."

Now if the formation of the material systems of the universe is to be regarded as the beginning of matter, then matter is modern in its appearance. Allow to geology and paleontology all the years they can reasonably claim, even into the millions, if desired, yet we repeat that matter, in comparison with our conception of greatest time, would appear to be of very recent origin. It would appear only as yesterday in comparison with cycles of days before; and indeed matter could not appear to man in any other forms than those it possesses. Take from it its forms, and it is incomprehensible and undiscoverable.

If the age of matter is to be investigated beyond its forms, as addressed to the human understanding, it leads to investigation in a territory where there may be conception, but with little or no knowledge. It is the territory where thought assumes to grapple with the unseen principle of matter, if indeed such a principle existed. Allowing that such a principle did exist before matter assumed form, and that it is possible for material forms to cease and matter be resolved again into its principle, there can be no approximate fixed date in human thought as to the origin of the principle of it. The highest conception would be that the present materialization is but one in the catalogue of changes. The most that could be successfully established is that matter, in form or without form, visible or invisible, is not eternal. The mutations to which it is subject are convincing testimony of this truth. Of course at this place we are speaking of matter as a whole, and not of those imaginary beings, or "manufactured articles," recognized in science as "atoms."

IX. Having now considered matter as a whole, having looked on it in world structure, both in diffusion and formed into spheres or globes, invisible and visi-

ble; having also looked upon it in its different kinds, it seems but just that it should be considered in its minutest forms, in its atoms. It exhibits its phenomena both as a whole and in parcels of one kind, and may be examined in exceedingly small quantities, but not in its ultimate divisions. While the atomic theory is acknowledged to be a fine conception and a splendid basis upon which to build physical science, yet there remains something paradoxical in the idea of an atom of matter. It remains to be proved whether an atom is really matter or a pure creation of the mind, whether an atom is matter or something else that must come together to begin matter. When a man undertakes to delve into the hidden recesses of the infinitesimal he so far loses his understanding that he is apt to grab for something upon which he can stand and rest, something for breath, just anything that satisfies the distress; and how often in the course of philosophy and science have these things proved unreal!

Because there exists different kinds of matter affords no more proof that an atom exists as matter than if there were only one kind. The chemist, after all his discovery of the different kinds of matter, their affinities and repulsions, their regular weights and association, the way they compound together or destroy the structure of one another by unseen forces, which he calls laws, is as much lost in his idea of an atom of matter as the common man. They are all alike driven to look into the infinitesimal, all searching alike for a beginning. No one can tell of its size, shape, weight, or which of the solar colors it reflects or which it absorbs; really can tell nothing about it.

But he logically infers this or that when any mass of earthy matter is put to the test. But whether his inference would bear him out into the region of this infinitesimal being remains a question. An atom cannot be tasted, nor can any multitude of them of the same kind.

Whether an atom of conception, set all alone to itself, is more than an ideal thing as is an imagination, a center, a circumference, or as is a geographical line, remains to be proved. How much of the infinitesimal must come together, or how many of the small conceivable "articles" must come together to entitle it to the name of matter, is absolutely unknowable. Yet the conception of atoms is a good basis for science as it now stands.

The idea that an atom is something real has obtained through chemical analysis and has gone out from the thought of science into an acknowledgment of the philosophical world. Well, really, taking a view of atoms as is ordinarily conceived, it all appears true and clear to the understanding. But the thought implies a great deal, and perhaps a little too much. It tells that our globe is formed of as many little globes as there are atoms in its constitution. As recognized science would teach, each one of those little globes is detached, in proximity to but not touching the one next to it. Then since there is recognized space between, may it not be pertinently asked: What occupies that space between? Evidently there is resistance, but what is it that resists? To discourse on laws, their nature, or on the nature of atoms in this instance, is not satisfactory. May not that something that resists, in the beginning size of its parts, be as great and as important as the beginning size of matter? Is that resisting principle a substance?

With due respect to atoms, as physical beings, upon which as a basis physical science is constructed, it is asked whether man has ever had a true conception of what is taught, and ordinarily believed, to be atoms of matter? If they are beings that a man can consider, he must go out in his thought into the border land of the infinitesimal, into that unseen territory where nothing begins to be something, and, transversely, where something may begin to be something else or nothing at all. Man may look upon this line, this edge between, but when he looks into this strange territory he is not contemplating a line between something and nothing, but between two somethings, between matter on one side and something on the other; a principle that was not matter, but which under some kind of evolution became matter; not matter of lump size, but of such particular fineness that its existence could never have become known unless a force had collected it into masses that present their phenomena.

Man may even be allowed to look back behind what may be conceived to be atoms, behind that border land where matter begins, even beyond the principle out of which it made its appearance; but in this instance does not the thought approach another border, another line? Is the principle the end, the original? Or does not another line interpose? How came the existence of this principle that seems to have contained the elements of the atoms of matter, even as atoms of different kinds are the elements of the earth's substance? Is there something or nothing behind this principle? If nothing, the principle is eternal. But if

eternal, it would have possessed an indestructible and unchangeable unity. There must be, therefore, a line between it and something else—on this side the principle, on that the other thing, the something else; even as in matter, on this side the atoms, on that the something else, the principle that contained the elements of the atoms.

The idea prevails that matter is something, and all else is substance, nothing. The word "substance" is ancient, but it was invented, as the general name applied to all things not matter and of matter—that is, there are substances that are not matter; but that matter is substance, and more than substance. Of course this seems like putting matter in the upper story of the thought and respectability. Hence, under the idea that creation is finished and of impossible annihilation of matter, there exists outside of it next to nothing or simple substance; and while there are recognized other existing substances, there is made little difference between an influence or force and that substantiality that produces the action.

It is easily discerned that there is a difference between matter and gravity, for matter is helpless, but gravity is an influence and force that gives to it both weight and motion. As forces or influences dwell in matter and control it, and as they may be regarded as nothing or blind except as they are exercised by some anterior substance that holds the office of responsibility, and whereas means appear to be substituted everywhere between the principle that would give motion to a body and the actually produced motion, therefore the influences and forces that operate all bodies must be themselves attributed to some anterior substance as

their own foundation. So, then, forces or influences may be regarded as midway between the operator and operated in the invisible world, even as they appear to be midway between the visible and invisible, between matter and substance.

As forces and influences are within themselves substantially nothing, anything that produces them must be substantially something, whether of matter or of substance. So that, without casting about for the possible, there is reason for believing that the materialization and immaterialization of principles accounts for much that now appears. This would bring forth the thought of unity in the creation, but that the multitude of mutations through evolution has produced the universal variety. Indeed, when man is called to look upon growth he stumbles, but, in present science, rests right at the verge of acknowledging that matter must be resolved into its principle before there can be such a mysterious thing as growth. He stops with a "manufactured article," called and known in science as an atom. Yet the atom at which he stops is a thing entirely out of his knowledge, merely a thing of conception. He acknowledges that matter must be previously resolved into its elements, atoms, before there can be growth. He must confess that gravity must be overcome somewhere between matter and a re-formation of matter. But what holds it and reapplies it in this new creation called growth, he is unable to know. Even as Solomon said anciently, man does not yet know, "how the bones do grow."

It seems that science is edging up to the idea of the materialization and immaterialization of matter. Only

the atom is in the way, or else there would be an acknowledgment that matter may be resolved into its principle. What that principle is or would be is not and cannot be a concern until after its acknowledgment. It is not likely that anything can or will be thought upon seriously until its existence is allowed. If it be allowed that atoms of some peculiar kind and fineness exist in the principle of matter, who knows but that it would take as many such to make one of man's globe atoms of conception as there are atoms of his conception in all the earth? Growth comes by mutation of matter. But the difference between present science and that science that may be is this: Present science would resolve matter into its conceivable elements and apply them; whereas it may be discovered, or at least acknowledged, that matter is resolved into its principle and then applied. In either case there is mutation that apparently introduces a new creation. The ground of debate would be conducted on the basis of atomic magnitudes. Of course all sizes are mere conceptions. All inferences may be drawn alike from all conceivable magnitudes. But anyway, in order that there may be growth there must be a resolution of matter, either according to present science into elementary atoms or else into the principle of matter, which may not be matter at all, before there can be growth. Growth is a work very much like a new creation, and heartily implies not only present existence of matter but also the present existence of its principle. So far as new forms of kindred relation are concerned, the creation is still progressing.

CHAPTER II.

MAN THE ONLY INTERMEDIARY BEING CONNECTING SPIRIT AND MATTER, OR THE PHYSICAL AND METAPHYSICAL.

MAN, being material and immaterial, body and mind, or body and spirit, holds by his intelligence and moral character the fitting place of all generated beings between the material and the spiritual, and for observing the phenomena of both physical and metaphysical things. He is the intelligent middle ground that looks upon and contemplates both the seen and unseen. No one can be conceived that occupies a better relation for these purposes, for he is the only thinking being of the earth, the only progressive, the only responsible, and has been of this character from the earliest knowledge of his race. Yet, however curious to relate. he is both seen and unseen to himself. The seen and unseen are in his perplexing consistence and seem necessarv in order to be the being that he is. It does not require a scientist or a philosopher to tell the world that a withdrawal of the intelligent life principle leaves nothing for contemplation except the useless and disintegrating body. Yet this piece of clay was once called a man. But this picture, like all else that belong to such a being, must, at least for the present, be put aside for after consideration.

Man while dwelling in the flesh is the intelligent and proper link between the two ways of looking upon and investigating the material and invisible worlds. The consistence of his being forbids any other conclu-

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sion, for he is both matter and spirit joined together and is intelligent—that is, he has mind, which can hardly be accounted for except on the ground of a spirit life within him. Yet man is so made that his eyes and all his senses turn naturally and directly toward the material world. This puts him, confessedly, at a disadvantage in his investigation of invisible things, even of those whose existence he is forced to acknowledge. The existence of matter, its continual presentation to his thought, and the way the senses are naturally turned toward it, have ever made it an object of prime consideration, but have likewise brought embarrassment and given man a load to carry in his attempts for deeper research. The phenomena matter presents speaks to man in open face and, so far as it is concerned, in no uncertain way. It is a thoughtless thing because it is helpless. The trouble in human thinking is that the voice of something else is too much taken as a voice from matter.

Thinking through matter, since all the natural senses turn directly toward it, is the customary way of getting knowledge and of establishing physical science. It is not deceitful; it cannot be. But since perfect or pure mind in the man being is put to the necessity of looking through material sense, deceptions may occur because of this obstruction and certain hardness of understanding. It is looking at things through an embarrassing veil. A multitude of things are not as they appear; and man, by constant looking and ever correcting himself, is gradually getting undeceived—that is, as a progressive being he is reaching out to his heirship, making his man being as nearly spirit in knowledge as possible.

Man looks on material things through his physical body; he sees, hears, and touches. If this were all, it would simply be a sense perception in common and not above that of other animals. But when he is brought to consider that he thinks over the things which he sees, hears, and touches, he is forced to acknowledge that there is a great mystery within him. He thinks and wonders over the consciousness or knowledge that he does think. He also feels the weight of cares and a responsibility strangely in contrast with all other earthly creatures. Hence the question arises: Who is really the man, the principle that thinks or the corporeal frame with animal life? In his thinking is there not a thought anterior, however much there may be of uncertainty and unconsciousness of its time existence; a thought before the thinking man connects himself with the external world through the natural channels of sense? Another question naturally rises: Could not that principle or spirit live and think without being clothed in a material body? And again: May it not be that the consciousness and knowledge of the man-being in the body are not altogether the same as the consciousness and knowledge of the man being out of the body? Or may it not be, since man has connection with the physical worlds through a material sense perception, that he has first an uncontaminated, pure spirit-consciousness unrecognized by the natural man and afterwards the recognized man-consciousness?

May it not be well to consider the relation the thinking principle in man sustains to the body by which it gets its connection through the body with the external world? A right understanding here would tend to bring variant science and philosophy more nearly in harmony.

The mere frame of a body with life and blood circulation would give connection, but not an intelligent, thinking connection.

There is reason for believing that the grossness of matter is too severe for pure spirit to behold. Hence in making man there intrudes a veil or medium that softens the stroke which the abruptness of matter would give; nor is even man permitted to look upon matter absolutely, but simply to see it through a material veil as an obstruction to true vision. To reverse this thought, if human eyes, without training or previous preparation, were turned into the spirit world, it might produce blindness or even greater calamity by its very severity. Hence the intelligent spirit or soul in man, which is more and other than mere animal life, is provided with material channels that soften the spirit's connection with matter. Man, therefore, of all beings, as is probable, has the greatest opportunity for getting a knowledge of matter, for his intelligent spirit in this beautiful way has connection with it. Yet after all the natural senses of man do not think, nor the nerves, nor the brain. They are only means of connecting the thinking man with the external world by which the mind may consider and judge material phenomena. Brain, nerve, and sense exercise is mainly produced by the anxiety and struggle of the intelligent spirit to take advantage of its opportunity for knowledge and the consequent pleasure and enjoyment.

But what is that thinking principle, that mind, that spirit, that life, that something which apparently imparts its own fashion and attributes to the body of man, and deceptively creates the belief that the material man does the thinking? What is that unseen, intangible principle that must be really the man himself; that principle which is the seat of intelligence, that thinks, wills, has power, controls and subjects the body to its own decisions; that principle that has life and reason, and without which the body is no more than organized animal life or as unspeaking clay?

Man has ever been slow and cautious in this direction, and has always been dissatisfied with his progress. Whenever he has set himself to the task of searching out the intelligent, living principle in himself, he has been too prone to contaminate it with matter or with mere animal life, and in its relation attach to these an undue significance and importance. He has been too much disposed to believe that there exists no life except the mere animal, whereas he knows that there is unintelligent life. Spirit life has a mind quality, whereas a life without such quality is not spirit life. Man seems to be in possession of both kinds of life. The animal life is necessary to him as a creature of earth clothed in matter, and the spirit life to make him a creature of mind and responsibility.

The senses of man's body, naturally turning outward upon material obstructions to his vision, cannot easily be reversed and trained upon immaterial things and view them as with natural sense. They are to be looked upon, the rather, with spirit or mind perception, or with that perception as distinct as possible and as free as possible from any intervening obstruction such as the natural senses give. If this were altogether possible, it would be pure metaphysical spirit or mind looking upon the pure metaphysical world. But a man is so constituted that he can and does look upon everything

better than he can upon himself and things like himself—that is, not on his physical, but upon his metaphysical being, which is the real ego. From ancient times the importance of this self-knowledge has been recognized, and man all along in the enlightened and progressive ages has been exhorted to look upon and into himself. He can look upon his body, his blood, his nerves, and his brain; but if he indulges the thought that he is looking upon himself, he makes a mistake. His real self—spirit, mind, and will—while they are deeply intangible, are, nevertheless, the man being.

There is great difficulty and embarrassment even in an intelligent being to examine himself and to know what he really is. He can look upon the physical things which are associated with himself and which draw the thought very nearly to himself; but these are unsatisfying and but drive him to harder work. In his effort to search out himself, he soon discovers that he cannot deny his life, his being, his mind, his thinking, his will, his consciousness. These exist as certainly as his body, and they are the most certain realities in the human constitution. A man thinks, and as he thinks he is made to know that he has life, mind, and consciousness. The organism of clay, or the human body, in comparison with this living, thinking principle, is like a dead engine. It has no power within itself to move. With all its artistic arrangement, the body, considered within itself, is powerless and dead. It is as a clock that stands still until a force gets in it and sets it going, or as any other thing made for service. As a thing of utility it must be used rather than using itself. An indwelling life, intelligence, and will are concerned in its existence, and it is subject to these

until it is worn out or in some way becomes an unfit habitation and is then abandoned.

But because a piece of machinery, either simple or complex, is worn out or so damaged that it becomes useless, gives no proof that the engineer and his force go with it to inutility and destruction. What, then, of man's spirit, mind, and will after the damaged and worn-out body is abandoned, and when the unthinking, irresponsible animal life becomes extinct and has gone with the body? What of this thinking principle that can belong to no other realm than spirit? Is it destructible or indestructible? Does it yet survive? Shall or can this thinking principle that thinks for itself, and also thinks through man's material body, perish because the body is no longer of service to it? Do the thinking principle and the body perish together? Which depends on the other for its intelligence and perpetuity? Or is it a mutual dependence? If the thinking principle is one thing and the body another, why do they separate after having once become united? Which possesses this judgment and wills it? Or is there any will concern about it? These are questions that neither scientist nor philospher should slightingly skip over.

The body is helpless within itself, has no choice, originates no action of the life nor motion of itself. In its subordination to the intelligent life that dwells in it, there can be no other than the condition of life and the will give it. When the office of the great Higher One is not taken into the account, it must be conceded that the motor power is most concerned, it being the active principle and intelligence. Therefore the separation is at its discretion; for only it can will, act, and exercise choice. With it rests the whole responsibility

of a separation. When the body, through age or through damage of any kind, loses its capacity to receive repairs and to give the thinking principle connection with the external world of matter, it is death, a necessary abandonment because of its inutility. It has passed to the impossible state, and there is no longer a hand in it that can make repairs. It is the death of the body and the animal life in man. As to the spirit, or the living, immortal principle, it had as well be anywhere else as about the old, abandoned body.

Man and all living organisms die. But it must be remembered that man is the only thinking creature, the only one endowed with mind, the only progressive and responsible being. He is the only one that can do homage, pay vows, appreciate a moral obligation, look upon the material universe and count the stars, measure and think of their magnitudes; the only one that can think upon metaphysical things and strive to search into their mystery; the only creature that can advance science and improve his condition. But it is needless to put in a catalogue all that contradistinguishes man from every other living organism. He is a class all to himself. There is in him an endowment and nobility of quality and character that can belong to nothing else material. To give this endowment to anything else is but to make it man. It could be nothing else. Whatever has not this nobility is not man, nor can be made man. There is no alternative in the matter. Hence man is the only earthly creature that is entitled to something extraordinary because of his extraordinary endowment.

The intelligent life in man is so different from the instinctive and unimproving life of all else that the thought of worthiness and unworthiness springs itself. It is a question of the future "survival of the fittest." Nor does it seem harsh if, in the economy of nature, or of Him who rules over all, the unfit or mere animal life perishes with the body in both man and beast. It is of the earth, given for the body, and must perish with the body. In the mere animal life there is no thought of the future, and it therefore must be limited and encompassed with the present existence. It seems almost a certain conclusion that the unintelligent, irresponsible life of animals, as with the vegetable kingdom, is temporary and perishes alike with their bodies.

But while the body of man goes to clay, and his ignoble animal life likewise perishes, what can be said of his spirit, that high endowment of his, that responsible, thinking, and intelligent principle? Does it still live? Is it not intelligent? Then must it not be spirit? Does not mind imply spirit? Does it still think? If it lived and thought while embarrassed with a material body, and was the mind, will, and noblest motor power of that body, is it at all unreasonable that it lives and thinks much better when released from its confinement and prison?

A man's habit and power of thinking while in the body and through the body seems to have a consciousness and memory peculiar and limited to his material state. This is a certain, but not the only, man state. It is the state with which man is now concerned, his first or beginning state, and all his memory and consciousness are likewise confined. Pure mind spirit, or that which may be conceived in authority over the body and over the animal life of man, seems to have memory and

consciousness peculiar to its state. When joined together, the person of man is different, even as his state is different. Man in the body knows nothing of compassion and sympathy for spirit. He feels sympathy and compassion only for his kind or for things that live in the flesh. As long as it has been taught that spirit existences live and are in punishment without hope, though a man believe it, yet from the days of Adam not a ray of compassion has gone out toward them from man. In his present state he is not in the least troubled over the condition of beings of that class. Nor does the world think much, nor is it troubled much, about the condition of departed spirits. The mind easily dismisses the whole matter.

Mind spirit that has once had a material body may have a compassion, consciousness, memory, and knowledge peculiar to such a state of man; yet it may contain much or all that belonged to man in his material state. Experiences are of use. They are educational. Every epoch in an intelligent existence that does not develop an abnormal condition means improvement, more intelligence, more sympathy and compassion, a better, nobler, and more useful creature.

Speaking after the order of the earth, man in the death of his body has no longer man memory and man consciousness, for his material state or epoch is closed. He has no man consciousness of his continued existence. With the close of his material state, seemingly, the whole man was blotted out of existence. But this is an appearance, a deceit, and is founded in the fact that consciousness in the material state of man is confined to that epoch of his history. He is no longer thinking through a material body by which he had his man con-

sciousness, and therefore his material chapter is closed. That which remains is pure soul or spirit consciousness, and doubtless retains the knowledge that was gained through its state of materialization.

It is proper in this connection to refer to science and opinions held and taught. For while the thinking man is in a material body, signs are given along the channels and ways that connect the mind with the world of matter which do show the activity of the mind, producing effects and doing wonders in the physical man. Hence in a scientific way much is said about molecular action and about motor and sensor nerves, or the carrying out and the bringing processes of the vision. As to these, their place and action, nothing is denied. But because of their action is it known that the inferences and conclusions are all correct? May it not be that there has been too much haste in reaching conclusions? May it not be that the pride of discovery, before the heat abated, has led to improper classification and application? For instance, can it be possible that a tree or any other object standing out in front can shake the human body or even one molecule of it? How can anything legitimately stir the body, the nerves, or the molecules of them except the life that animates and has full control of the body and all its parts? Does it not seem that the molecular action excited in nerve and brain in the life and mind connection with matter is the result of life and mind action, and not the effect of outer objects? May not the unsubstantial image on the retina be merely incidental to the eye's peculiar formation? An object intervenes in the line of life's vision. It intervenes as an obstruction in the light, for the light is really the thing which the life sees. The instant it intervenes the

material channel of vision becomes excited, and sometimes the whole body is agitated in its haste to impart it to man's consciousness. To speak more clearly, which produces the molecular action and even sometimes shakes the whole body when obstructions to visions intrude, is it the influence of the object or of the mind? In answer to this question, the thought will cling to the life power within the body which fully and wholly possesses it. The answer therefore is that the influence comes from the same source that enables a man to point the finger or raise the arm. Unconsciousness of the exercise of the mind and will gives no proof to the contrary. The truth of nature should be seen and accepted and the long-continued plague of materialism should be put aside.

The seeing and thinking man digs no tunnels in his material organism, bridges no rivers, scales no barriers to find connection with the material world. His material body of connection is provided with the avenues all open. In order for proper connection, the way must be clear even as nature has provided; a good eye, a good ear, a sound nervous system, and a well-formed brain to connect the thinking man in great strength with the world of matter. The body is the medium of the spirit's connection with all coarse and harsh existence. This thought is as old as Socrates.

Since education, in common expression, is only an apparent manifestation of thought and knowledge to the physical man, which in truth the real or thinking man already possesses, the importance of perfect brain, nerve, and sense structure must be acknowledged. According to their perfection is the connection with the external world made, and in the degree of their perfec-

tion is a consciousness awakened and knowledge gained. Whatever the thinking man is or can be in knowledge, he is so conditioned and compounded with matter that as a man of the earth he cannot in knowledge transcend the plane of his sense, nerve, and brain structure. They both seem to run evenly together.

A man cannot leap to the moon, nor does he ever think of trying to do a thing so impossible; yet the thinking man, or his thought, is there in a twinkling and exploring. It is called a thought, but who knows what it is or what eyes accompany it? It does not originate as thought in the ox when thirsting for water, for that is earthly, it is animal; but man, having in him a component more than of an earthly nature, thirsts for knowledge. Who knows or can know all that is in the spirit mind of man? It can be measured now only by its operation through a material body. Is not man in his physical embarrassment striving to be all that spirit is when uncontaminated with matter? Is there not evidence in him that he feels weakened by his body of matter? He is "made a little lower than the angels." What the mind spirit is or can be in a disembodied state is too metaphysical for man to contemplate while clothed in a material body. Thought is very strange and incomprehensible to the human understanding. The leaps it makes, the breadths it spans, and the distances to which it takes its flights almost take man's breath out of him.

Matter, or the human body, is certainly an impediment in the way of the spirit mind. But as it was necessary that man should appear, there was no alternative but that he should appear weakened by a material body. Yet, although confined and shorn of strength,

it is the only way that spirit seems to have any connection with the physical universe. It is in this way the spirit mind gains a knowledge of matter and the living organisms made of it. It is on the ground of this well-founded weakness in man that he is so often forced, while in the midst of the outlying truths of the universe, to confess his ignorance. With him few things are axiomatic. Alas! how few! Why does he not see more truth? Is it not the cloud of his materiality in the way of his spirit mind? There seems to be no other conceivable way of interpretation. doubts arise and theories are spun about a great multitude of things. Really there is little that is positively known by man in comparison with that which is unknown and doubtful. Yet there is truth everywhere, but most of it is not easily discerned by man. Hence man is so constituted that he is compelled to be a creature of belief more than of knowledge.

Man is capable only in the degree he understands. But his understanding may be increased and his capability in the same degree. This is done by purifying and perfecting the avenues by which the mind makes connection through the body with the physical world. Herein, it is believed, is the hope of science, to see more clearly, and to have the material frame as little in the way as possible. Hence the aptness and truthfulness of the old saying, "A sound mind in a sound body." This, however, may be paraphrased thus: A pure and perfect brain, nerve, and sense structure for a strong and understanding mind; for the purer these are the less the matter of the body is in the way of mind perception. Hence is seen the importance of physical culture and the stress laid upon it. Yet phys-

ical culture does not consist alone in gymnastic and football exercise, and the whole catalogue of such games as are common with the schools of the present day. It must recognize self-denial; no excess in modes of living, no excess in appetite and passion. For excess stupefies, renders impure, and weakens the mind's connection with the external world through the body. It does not depend so much on how much a man can lift, how fast he can run, how hard he can strike, how far he can leap, as upon a free and perfect way to exercise the mind through the body upon the material and obstructing world.

But coming back to the true position, let it be again stated that man is the only known intelligent link of connection between the material and the immaterial, between the life with mind and that coarse stuff called matter. It should also be remembered that a distinction has been made between pure mind and man mind, or between spirit sense and knowledge and man sense and knowledge, and that each may have its respective consciousness, but that the spirit knowledge and consciousness includes the man's, and is therefore the superior. Man, being joined with this spirit of higher perception, and yet compelled to seek his knowledge through a material body which gives his spirit connection with matter, feels his embarrassment. Hence his longing desire and ambition to be more than seems possible; for, having associated with him an intelligent spirit, not fully apprehended, however, the culmination of his satisfaction cannot be completed until he becomes all that it is in sense perception, knowledge, and power. Yet it may be apprehended that the very spirit itself, by its association with matter, will have

made unto itself a higher attainment by passing through such an epoch, for there is strong probability that spirit cannot have such consciousness of matter and its phenomena except as it is given a prepared body or medium for its discernment. Should this be really true, which seems probable, the disembodied man will be very great in his attainment in the scale of intelligent existences. If spirit and mind by existence have intelligence, their opportunity has been increased by connection with matter.

All living organisms, whether material or immaterial, possess qualities peculiar to their respective The material organisms of the earth seem to possess no qualities above the earth except in one instance—that is, man. Their habits, manners, and whatever thought they have are not above the earth. None of them show qualities that would place them on a higher plane. The life in them, whatever it is, shows no quality above the earth. But spirit, which may be regarded as a living organism of some kind, has qualities above the earth. It has the quality of mind. It is not known that mind can exist without spirit. Mind, except in connection with a living spirit, is unthinkable. There can be no intelligence without life, although there may be life without intelligence, even as the lower creations of the earth do show.

The intelligent spirit is the living entity in man that is, or ought to be, supreme and above his earthly or animal life. Mind is the great quality of that spirit, and through this quality the dignity of the spirit becomes known. Mere spirit, if such could be without mind, would be incapable of reason or judgment. In such a condition all law would be needless. There

would be no understanding, no obedience, no appreciation of obligation. Consciousness is a mere motion or feeling in man of the existence of things. In a moral sense it leads to the judgment that renders the decision of approval or disapproval. It occupies a place midway between a man's conduct and his mind. Without law, without a knowledge of law, without ideas of the rightness and the wrongness of things, there could be no consciousness of right and wrong and no feeling of approbation or disapprobation. But these belong to man, and they hold him a distinct class from all that is of the earth. He is of this class because, above natural or animal life, he has a spirit within him, and spirit implies mind, and mind implies understanding, law, and obedience.

Material science is very bold. It is almost disposed to claim that, inasmuch as molecular action produces heat, it likewise is capable of producing life that may ultimately be evolved into a thinking man. It is right to allow to molecular action all of which it is capable, but it is equally right to limit it to actual discoveries made, or at least that the conclusions do not overstep reasonable inferences. Molecular action. friction, or any mode of force that would destroy the structure of material things, is known of all to be a process by which heat appears. This is all that is really known about it. Heat is still a hidden agent, takes wings and flies off into the speculations of the corpuscular and wave theories. This is the way many things in science find their graves; nevertheless all discovery and all truth is good. But whether heat is a substance or a mere effect or expression out of substance is unknown. All knowledge of heat and

light is hypothecated on the existence and nature of interstellar ether.

But the question is not what produces or displays heat, but what produced the molecular action. Nor at this place is there any concern about the molecular action and the resulting heat in dead matter, but in the enlivened. Scientists say that the molecules of the nerves and brain get in motion, and hence sense perception and thought. This is a parallelism of the production of heat—that is to say, molecular action and sensible heat as a result; and again, molecular action and sense perception, thought, and reason as a result. This is materialism in its naked theory. Now it is not denied that the nerves and brain get in such motion, but it is denied that the motion is necessary for the spirit's vision; or at least, if necessary, the motion is caused by the force within and not from the object without; that it is the struggle of the life within to connect itself through the body with the external world of matter or with anything that requires a material body for the mind's perception. The body is artistically arranged to see through, to hear through, and to feel through. So far as pure mind is concerned, in order to its vision, it needs no more to wake the molecules of the nerves than the common observer needs to put in motion the molecules that compose the lenses of his field glass. There is reason for believing, when philosophically sought, that much of that which has been written and taught about the uses and duties of the motor and sensor nerves in their carrying out and bringing in processes is not of correct conception. It is degrading man to too low a plane, too much like placing his artistic frame on the same level with dead organic matter.

Allowing that there is molecular action in the nerves and brain, the question may be asked: How is this action produced and what is it for? Some have conceived that it requires time, and have even calculated the time it requires to convey through the nerves to the brain an injury of the body, and therefore a little more time to wake up the life's consciousness. But no one has ever made known, other than in theory, the difference in time in reporting an injury to the hand and foot. Really man is not long enough, nor the nerves, with all their ramifications, to show a difference. Whenever the earth produces a man a hundred feet long he will be a good subject on whom to try experiments of this kind and to tabulate the calculations. Till then the question will probably be at rest except in theory.

The spirit mind sees and knows instantly and constantly, and in this pure perception has its own peculiar consciousness; and it is doubtful whether darkness or sunlight has anything to do with its seeing any more than with its hearing. The question here is the man consciousness, the consciousness of the being who is joined with matter and without which there would be no man. Natural light is necessary to man, but not to pure spirit, except as it becomes joined with matter to constitute the man of the earth and thereby give into that spirit additional knowledge—that of matter.

The body, like every other obstruction of matter, is to be lifted, carried, placed, and protected, but with this difference: The life within controls the body immediately and directly, but other bodies of matter through the use of the material personality. As danger comes toward the eye it is warded against by a voluntary closing of the eyelids. The life sees the dan-

ger and seeks protection, but sometimes fails in protection. This may be either because the life does not see the danger at all or because the danger is too immediate for the life to impart action to the body. The coming dangerous object must be seen, or else how can the life prepare for a defense of its material body? The coming dangerous object could not affect the body, except as the life in its instinctive or intelligent character first sees it and prepares a defense by stirring a molecular action, or any other necessary action that leads to a closing of the eyelids.

In this instance of the eye there is as likely to be created a molecular action as in any other condition. Yet it must be created by the life and for the purpose of protection. Is it at all unreasonable, then, that molecular motions are produced in the body for purposes other than of seeing, hearing, and touching, and that it is too strained to believe that in any instance they are produced by the influence of the outer object; that the influence does not travel from without to within on a road of nerves in order to produce sensation and knowledge in spirit mind, because the spirit sees, the body being arranged for that purpose? But that which the life or spirit sees and of which it has immediate consciousness, it gives to the man consciousness, and in order to this it stirs any necessary action in the body. Or may it not be assumed, since the body is an organism framed for the life to see the external world of matter, that the life with mere instinct or with mind must first be consciously impressed with what it directly and unavoidably sees, and that it only stirs the molecular action and sometimes a shaking of the

whole body? Does not the life have control over the body generally and particularly?

It should ever be borne in mind that the artistic human frame is the lens connecting the invisible, intelligent principle in man with the material world, and that this is the highest reason for having an intelligent spirit clothed with matter. There is brought about a complete, though imperfect, relation between the intelligent, invisible spirit and matter by the intervention of the human body. The lens is complete so far as the contactual relation is concerned, and the animal sees, hears, and touches without a motion of the body, without a motion of an organ of it, without a motion of a molecule of it except as the mind stirs the influence. The molecular motion, which is so much insisted on by material science, and which is not at all denied, is not necessary to the consciousness of the pure spirit in man, seeing that it has the body as its own contactual lens with matter, but the rather to impart consciousness to man in his character of a compound being.

Allowing that the spirit mind exists, that it is invisible, immaterial, and therefore not dependent on matter, to say that it cannot have a thought and consciousness only as it is shaken up by material molecular action is absurd. It is the body that has to be waked up and moved upon by the life or spirit mind to stir the human consciousness. The mind observes motions from the least to the greatest, and may have thoughts concerning the motions it observes, but in the body which it occupies and controls it is master and is dependent on it for nothing. But that dual being called man is largely dependent on the work the spirit does through matter for his knowledge.

In further illustration that man is the connecting link between the intelligent, spiritual, and the material there is something to be obtained through a careful examination of his face. Things are written on the face more than color, beauty, smoothness, harshness, delight, joy, hate, anger, and a hundred other shades and changes of common observation. Human faces change as circumstances influence and control, and they are a fair index of the mental state each hour. These, however, under a will force may play around more or less deceitfully. But there is a sign written on the faces of men that in itself cannot play deceit. It may in a manner be covered and hidden, but it is never destroyed. This is the index that shows what a man is, not his character so much, but the principle from which a high character may be formed.

Of course there are many kinds of human faces in the world, far more than are necessary; for human faces take a larger range of differentiation than any other animal that exists. Among the best improved and most intelligent races of men, right in the midst of the most improved political divisions, faces are met that compare almost unfavorably with the average of the most degraded tribes of men. Man's face can be improved or degraded not only in physical contour but also as to its index of reflections. Standing as the races do this day, reason points to a common origin; but time, circumstances, and other things not well understood have wrought the deviations in both faces and forms that now appear. It may be well believed that a change in condition, circumstances, and education, equalizing opportunities and advantages, would

work such improvement that the idea of a common origin could be more universally accepted.

Human faces do not impress alike in those deep-written yet often half-covered lines that express the spiritual man being in contradistinction from all other animals. As an index that man holds a place between two worlds, the spiritual and material, he wears a sign on his face, although often much covered and hidden, that is not hard of discernment. The degradation into which some tribes have sunk threaten its obliteration, yet in the most untutored and darkest regions of human existence there are always found more or less faces that wear the sign and tell in hard accentuation the high origin of man.

But it was not particularly the intention to refer to the physical contour and aspects that the different faces of men present, but to the combined material, mental, and spiritual reflections they impose upon the thought. Some faces reflect scarcely more than materiality with life, others strongly mento-materialistic, others almost purely mental, while others are well marked spiritually, which strongly indicates another being besides the material body, that man's place is a position between two worlds, the invisible and the visible. Because man is flesh and cannot look into the invisible only in a reflective sense, is no disproof of the connecting relation he holds. He is so constituted that the mind which has come into him holds the index finger pointing toward the material world. He can only realize that he is a being dwelling in a border land not body alone, nor mind alone, but spirit and matter conjoined, giving him his border land place that he

might be the connectir junk between two worlds, matter and mind or matter and spirit.

For a moment compare facial reflections of other animals with man, and behold the contrast. It is unfair and out of reason to compare the worst of one with the best of the other, which has grown to be a sort of habit in making distinctions. It is proper and reasonable to compare the best of one with the best of the other, or the average of the one with the average of the other. Do this in any fair way, and the gap will show wide. The facial reflections of the one are animal, with only animal intelligence. The reflections of the other are not only animal with animal intelligence, but an intellectuality, spirit, and mind.

Hence it may be concluded that to deny spirit in man would be Sadducean. Such an argument pursued to final results would lead to a denial of both angel and spirit, and even of God himself. It would lead to a complete acknowledgment of materialistic philosophy, that matter produces force, force molecular action, and molecular action heat, light, life, mind, will, and reason. But if it be granted that limited or created spirit exists, is it at all unreasonable, since an epoch of matter was introduced in the universe, that spirit, which may have already existed, was for a purpose conjoined with matter? In this there is seen the beauty not only of life joined in matter but also spirit with intelligence and understanding. Hence why should there be skepticism about the olden history which says: "God made man," made him as any other animal, but breathed into him a never-dying spirit with mind. The expression is, man became "a living soul"—that is, undying,

immortal. Is it not more reasonable to conceive this to be the spirit rather than anything else?

Assuming that man is pulling himself out of calamity rather than evolving out of low origin, and acknowledging that there would be a likeness in his rising improvement whether either be true, he was nevertheless in the beginning of his existence classified above all other material creation, and holds that place unto this day. He was made of such distinction that it is forever impossible to turn him into a monkey, and of such distinction that it is impossible to turn a monkey into a man. Man received something in his origin that so markedly differentiates him from every other earthly creature that he always has been, and is now, a class all to himself. Such is his history. He must have within him spirit. There is nothing else conceivable.

Man is so contradistinguished from all other creatures, and has an endowment that renders the changes some imagine altogether impossible. No one, now or ever, has seen such a process going on, either of turning men into monkeys or monkeys into men. The argument had as well be ended, for such a process is impossible. Among the lower grades of men, where monkeys and men have dwelt together for a thousand years, there do not exist even a legendary tale of such lusus naturae, gradual or otherwise. The thought of it does not belong to the territory where such sports should be played, but to the camp of the highly civilized, educated, and enlightened; to that territory where there is great strength of mind, but an imagination that has always kept equal pace with it.

What God breathed into the animal man, a never-

dying life with mind which may be called spirit, he has given or breathed into each of Adam's sons and daughters. It is just as reasonable to believe that creation is still going on as that it began. The first man appeared not only as an animal among animals but also in the intelligence of spirit life, immortal. Reason shows how man as an animal can increase his kind and be fitted as an animal for only earthly existence; can show why such limited responsibility was intrusted to man, but is at a loss to find why man should be clothed with that greater power and responsibility by placing, along with his natural increase, an immortality, a spirit mind, and made responsible. Spirit mind is certainly something not begotten, but given in the process of a continued creation. Man's nature and responsibility in the multiplication of his kind run parallel with the other animals of the earth. In this respect he is a limited being and cannot rise above the level of the other animals. Yet he was commanded to multiply his kind, and no argument concerning the purity of creation can shut off or hedge the animal nature that is necessary to Because man, so to speak, has been allowed this partnership with the Almighty in making man on the earth is not a degradation of that great One. It is only one of his wise methods of continuing a creation which had a beginning. It also shows that man is the connecting link between intelligent spirit and matter and between the immortal and the mortal.

It seems to be a basic principle that whatever is necessary to an earthly animal existence may be begotten, and that it is likewise perishable. So it may not be unwise to conclude that all the work of man in the pro-

man is in company with them. Yet if this were all, there would be no man on the earth. But since man thinks and possesses elements of being so transcendently above all, there is something in himself not of his own making. It is the greatest power within him, his unseen, God-given part, the spirit mind, his immortality. It is something of such consequence that animal instinct is driven to its minimum and made quite unnecessary. Something that really does not belong to matter, but has become associated with matter that such a being as man might appear in the universe, and that there might be made a connection between the powerful and the weak, between the visible and the invisible.

Such an expression in divine consultation as "Let us make man," was never spoken about a fruit-bearing tree, an ox, an eagle, or an elephant. These were all made unceremoniously, and from the lowest to the highest they are graded only by degrees of difference. There is no connecting link lacking throughout the whole scale. Yet if there is an immortality, or anything of the kind deserving immortality anywhere in the whole list, no one has ever been able to name where it begins. there is intelligent spirit or mind, no one knows where it begins. They are a class all to themselves, all only of the earth, and are creatures only for the earth. So far as history treats, they have never made improvement, nor have they retrograded. How unlike man! It all shows that everything below man is altogether lacking in endowment or principle that he possesses. Their connected relationship is fixed, whether is considered their physical structure, their life, or their modes of life.

Nor does it appear unreasonable, in the light and work of wisdom, that this should be the proper fashion of populating the earth when there is involved no higher consideration than creation of earth and things only of time. The theory of natural evolution conceives and recognizes such to be the course of nature that is, under their own nomenclature, it is natural law. They make their argument from present existences back through the fossiliferous. But all this amounts to little, for every epoch of the earth has had creation and held generations adapted to its weather. know that present existences are here, and that the gravevard of the fossiliferous contains the remains of that which was. Since a direct creation would run a course of the same naturalness, does it not appear that a direct creation is as probable as the theory evolution, and that a direct creation, meeting the epochs of the earth's weather, is the proper way of accounting for the things the natural evolutionist is at a loss to know. An acknowledgment that God not only begun but continued his creation with adaptation to the earth's changes would help to restore confidence in the writings of Moses when properly understood.

But the above digression was not intended. Coming again more directly to the subject, it may be said that when man was created he differed from all the rest not in degree but in kind. He differed least from the rest in his physical frame. But even in this there is an impassable gulf which the naturalist has never bridged. It matters little whether it is ever bridged or not, for the main argument does not tend in this direction. The argument is concerning the

spiritual and material, embracing also the difference between animal and spiritual life—not the mere instinctive animation of matter as shown in the ox, the eagle, and the monkey; but the spiritual, intelligent mind, animation of matter as shown in man, placing him in such distinction that he is able to appreciate the virtues of moral law—a distinction that causes him to strive for excellence; that supplies him with ability to continually progress in understanding and knowledge; that gives him a superior consciousness which provokes the feeling of joy or pain, according to the rule of his conduct; a distinction that brings dissatisfaction with any stage of his improvement, and still spurs him on to higher and nobler achievement.

What is it that puts in motion the immobile body of man. First, it is life in the body as in any other animal. A life that instinctively desires comfort, ease, rest; but a life, however, that will labor for sustenance, that will forego hardships to satisfy hunger, slake thirst, and quiet passion. This is a mere animal life, procreated, that lives and perishes with the body. It is a life that feels no concern only for this body, selfish, covetous, revengeful; a life without qualities of nobility and therefore undeserving perpetuity. It is just such a life as belongs to the lower order of existences. But secondly, it is a life of better quality, a life of mind. It is a life of reason, and is able, though with great task, to curb, dominate, and subdue the animal life, which is always impatient and has within itself no moral ideas and no smiting conscience. As a rule one or the other of these lives prevails in man.

Again let it be asked, What is it that puts in motion the body of man? It is life merely animal in common with other living beings, and a life spiritual with mind. The former of these is not under law, nor can it be, for it has no quality by which it can understand the meaning of law. The latter is capable of being under law, induces the intelligent and nobler actions of life, and is amenable to some court. It is the worthy part of man, and while joined with the body has a separateness from the body more distinctly than the mere unintelligent animal life. It may be perfect or imperfect, but in whatever state, since it is not begotten of man and is spiritual, it is immortal.

Both these lives are capable of giving motion to the body—the one a motion of merely animal ministration as shown in the beast; the other with the effect of mind, thought, and reason with the power of choice, and with a moral consciousness that approves or disapproves all motions made. It is this that properly connects the immaterial and the material worlds, that gives man his transcendency above all perishable things, that gives him moral character, makes him amenable, makes him subject to judgment, and entitles him to immortality.

Wrapped in his thought and contemplation of himself, man looks into his being in wonder that rises into amazement; not into that curious structure, his wonderfully wrought frame, for this in comparison is insignificant; but he looks with great wonder upon that greater scene, the working of his spirit and mind. At one time he finds his thought placed upon the material, observing the order and rule under which material phenomena are presented; but again he finds himself as though he were out of the body, gone out into the territory of the unseen exploring, and in holy

contemplation of the invisible. He knows that he thinks, and that his mind and thought, whatever the weakness and confinement of his body, and whatever the imperfections of his conclusions, are not limited except with the range of both material and immaterial things. It all bespeaks an intelligent spirit life within him.

Man knows there is no other creature on the earth endowed as himself. In his contemplation of himself he realizes that he is not all material nor all immaterial, but a combination of the two. Yet, considering himself first as simply a material being, presenting himself as such like other animals in life modes, it becomes no easy task to break the barriers of his confinement and behold himself as he really is in spirit, mind, and thought.

Man moves his foot, bows his head, raises an arm, points a finger at will. The lower animals make similar motions. Yet in all mere animal existence there is a begotten or transferred force or life that cannot live without a material body, and therefore perishes with the body. There is reason for believing that such a life as this is in man along with the other animals of the earth. Such lives and bodies of man and beasts are of equal nobility. Their bodies are of matter and their lives unintelligent and selfish, and their thoughts not above their appetites and passions and their modes of an earthly existence. Such bodies and such lives contain no argument showing a necessity for future existence when once dissolved. The true argument for perpetuity is based on higher ground than any principle which mere animals possess, even when man is placed in the same category. But it has already been

noticed that man can raise an arm or point a finger with intelligent and moral motive. This is his higher department of life, given him, not transferred, responsible, immortal. The very thought that man in his animal nature should have power to propagate such an intelligent entity, with all the responsibility and accountability attached, is unreasonable. Verily, it is making man in creative skill equal to God. That is, God made one immortal man, and man makes all the rest. It is unreasonable. What Adam begat were children in his own image, mortal beings.

What is this that works in man, and yet creates no motion of the body? This thing that thinks, wills, and even plans destruction; that murders his fellowman without opportunity to do the blood-flowing deed? This thing that makes a man feel guilty in his secret thought when no human law apprehends, that makes him recognize that he has a case in court somewhere, and that if no human law can call him to justice because he did not commit the overt act, yet nevertheless his crime remains in his thought with all its bloodguiltiness, and will forever remain until he is adjudged and suffers the penalty or, under some rich provision, obtains a pardon? It is asked what is that inner thinking, hating, planning, murdering man when the body has no connection, that abates or postpones the motion it would give the body on arrival of the prearranged opportunity? It must be the same spirit that makes the body repeat the existing act of its own conception and motion.

What is this that lies outside of every motion and act of the material man, that acts for itself, and uses its own material body as a club in committing murder or in doing any other unlawful thing? It must be a living principle with mind in the body but not of the body; and it must be corrupt, because it yields its greater strength and is dominated by the appetite and passion of an animal nature. So it may be conceived that the body is entirely dependent on the life and mind for its motion, but that the life and mind are dependent on the body only to give them connection with the material world.

The acting entity mentioned is commonly called thought, and dismissed with but little further consideration. This is but a negligent way man has of excusing himself from deeper research, and a cunning way of seeking palliation from his guilt. Thought cannot exist, nor can be conceived as existing, without ailowing its producing entity. Nor can thought be any kind of entity within itself. Thought and the being that produces it have a very peculiar and indefinable relationship. In thinking of the moon, neither the thought nor anything in man, unless it be a spiritual vision, has escaped and gone that distance. The man, his mind, and his thought are all confined together. They are all within the man. Hence thought, whether of distant or near objects, can be no more than a conception or idea impressed upon the consciousness through some kind of sense perception. Therefore when a man thinks, plans, and arranges, but defers the time for calling his body into action to perform a physical part, his spirit has already acted and is stained with guilt. But it should not be held, because the spirit can act and incur guilt, that it cannot think, plan, and arrange for good as well as for evil. The argument made is meant to show that there is a spirit mind in man

that thinks and acts for itself, that can be guilty or innocent according to its conduct, and that its material temple or body is wholly at its service.

The body of man, animated by intelligent as well as animal life, is dependent on the life for its protection. The life owns the body, and not the body the life. The body is made for the life's service, to be used by the life, and is in no sense per se accountable to the life, nor is it in any way responsible for conduct. It simply does as the life makes it do. As a means of connecting the life with the material world, the life would make the body as perfect as possible. It takes care of it in the embryo state, guards it in all nutrition and growth, and labors with it to make it as perfect a means as possible for communicating with the worlds of matter. The intelligent spirit life seems to use a fatherly care over the body or medium that gives it connection with material things. It shows no disposition to break the connection, but loves it and cherishes it for its own delight and knowledge. This is done not altogether through love of the body, but in a larger sense through attachment to the means that afford the pleasure, delights, and knowledge that come by its connection with matter.

Now let a moment be taken to look particularly on the life in connection with the body it animates. In the vegetable kingdom it is comparatively without defense. The body of such a life is the prey of all enemies. There is no trembling nerve, no warning voice, no uplifted hand at the approach of danger. The tender climbing vine and the sturdy oak fall into decay and death alike, without warning and without resistance, except such as fiber and wood can yield, together with the effort upon the part of life to repair the inflicted injuries. There is a marked improvement in the arrangement as seen when the lower orders of animals are put under review. Here is beheld a higher plane of instinctive life; a frame that can tremble at sight of danger, a voice that can cry for help, ways and means of defense when attacked, legs and wings that can carry the body from the field of danger.

But man is a being all to himself, is over a bridge that the material evolutionist has never spanned, and, according to the light now shining, the probabilities are that his task will never be done. Man is in the territory of life with mind, a spirit life. It is an intelligent life that stirs a molecular action in the nervous system and intelligently shakes the body from head to foot to arouse the man-consciousness to danger and defense; a life that apprehends danger before it is seen with natural sense and prepares, plans, and builds for defense.

The mere instinctive life in beasts, and both the instinctive and intelligent life in man, make a hard battle for the safety and preservation of the material body. Wherever there is a voice, a hand, legs, and wings, they are called into action. The body is the life's home, and it loves that home with care and sacred devotion. It will yield that home to destruction only in the hour of last extremity. All wounds are healed and all repairs are made within the range of the life's power. Even in the moments of great pain, gaping wounds and flowing blood, it struggles not for release, but to make repairs, and still preserve and keep its battered and ruined home; and even in the extreme hour, when hope has fled and the ruined

tenement must be abandoned, the intelligent spirit-life sends forth through the body a groan as a parting message of its love and its own anguish under the compulsory separation.

The living mental man exists in a material mold. It is the matrix of his being; and though he is a living and acting being, yet while in his first stage or earthly epoch he is dwelling in a tomb. When through the unfitness or death of his body he gets release, it will be as a birth into the beginning of a new epoch in his existence. Yet whatever may be his hope, whatever his faith in an awaiting blessedness and knowledge, the rational man would still cling to his first epoch and material tomb. He knows that whenever he leaves it the beautiful organism falls into unorganized clay. In the midst of his highest reason to the contrary, it seems to be himself and about all there is of him. Hence he loves to stay with it and is loath to separate from it, nor will he do this except in the extreme hour. Man cannot bear to see his body grow pale and start on the way to decay and ruin. In a thoughtless hour it appears too much like blotting out his existence from the universe. He can bear his halting gait and his increased disposition to seek rest better than to behold himself in a mirror. This speaks to his eyes with intensest emphasis.

Man's spirit loves his material body and the tomb life of his first epoch. The body has been a joy and delight to the spirit mind, and would be forever if it did not become more and more unserviceable through the wear of time, disease, and age. In its perfection it brings him sweet sounds and delightful visions of all things in the earth, and connects him with the rhythm of distant orbs—the sun, moon, and starry host. Through it the spirit life speaks to them and they speak back to it. But time affects the sense. The eyes grow dim, the ears grow dull, and paralysis seizes the brain itself; the stupidity of consciousness increases, attention declines, and general obliviousness spreads the warning curtain. Gradually the power of the life's connection with the material world abates, and there is no longer utility of the body and the spirit of man breaks out of its material matrix and enters into the birth of a new epoch.

Man does not know that the contamination of the spirit mind with matter has ever added strength to its faculties. While it is highly supposable that spirit cannot discern matter except by being clothed in a body of matter, and that in this way spirit is enabled to get a knowledge of material things it could not otherwise possess, yet even this gives no proof that the spirit's faculties have been strengthened. The revealment of man's own mind and knowledge seems only to typify the great strength and knowledge of the mind spirit when unembarrassed with matter. The following quotation from Paul the apostle will help to establish this truth: "Now we see in a mirror, darkly; but then face to face: now I know in part; but then shall I know even as also I am known."

Man knows that there is something enjoyable and delighting to the mind spirit within him on beholding the material universe through his artistic and well-arranged physical form. Furthermore, whatever may be the power of faculties and innate intelligence of the pure spirit mind, and however little spirit may need schools and universities for its training and improve-

ment, yet man knows that he has consciousness only in the direction that his intelligent spirit is connected with matter. He experiences this narrowness within him, and in the midst of it he feels his weakness almost unto lamentation. It gives him distress and makes him dissatisfied with himself. He feels that something is limiting his power and hedging his progress, and he spends his life trying to break down the walls of his mental imprisonment. Why this dissatisfaction? Why this ambition and striving for the unattainable? There seems to be no conceivable answer except through an acknowledgment that there is associated with man a spirit with endowment and knowledge that cannot be revealed to man consciousness through his body of matter; that the sense perception of the spirit mind outside of matter is more perfect and far better than through a body of matter.

There certainly must be a difference between the consciousness and knowledge of man's pure spirit and man himself. Man's consciousness and resulting knowledge must be a revealment to him through material channels. Pure spirit may be wise every way except in the knowledge it obtains of matter by its connection with this category through a material body given unto it. Man begins life without knowledge, either connate or intuitive. It cannot be so declared of man's spirit, of which mind must be a concomitant. Man is dependent on sense connection with the physical world for his knowledge; but his spirit, otherwise intelligent, depends on the material sense connection only for its knowledge of matter. Knowledge comes to man gradually and unfolds increasingly; and it would

seem, in respect to the universe of matter, that is true with his otherwise intelligent spirit.

There seems to be no proof that the pure spirit and mind of man are as ignorant, as uneducated as man is in his own limited man consciousness. May there not be and is there not a distinction? The spirit and mind, holding the office of instructor to this new being called man, must have a precedent knowledge even of matter before they can impart it to the man consciousness. It may be that man's progress in the knowledge of material things is identical with his spirit and mind progress, that they move forward pari-passu, but of this there is no proof; for there is quite a difference between pure mind perception, even through an arranged body of matter, and giving the man consciousness of the things perceived; for in this case there is perceived the superior knowledge and office of teacher. The pure spirit mind of man may have known that color is in the light, and not in the material object that seems to possess it, long before it was revealed to the human understanding.

Man, standing out the peculiar creature that he is, compound of animal life, spirit and matter, is seeking education for himself and not for pure spirit. He has mind, faculties, consciousness, and knowledge. When he appeared, he was a new creature in the universe. He is so constituted that the knowledge in the universe must be revealed to him through material sense. But even in this he is limited. After having gone his full extent, as a man he is still the object of compassion on account of his weakness and ignorance. He bears within him, as his history shows, the signs of progress, and is beating on toward that evolution and enlighten-

ment that comes of material dissolution, when that High One, who gave him his mysterious being, shall more widely open the range of his understanding and establish within him a nobler complacency with delightful employment in his approaching epoch.

In view of all that man is made to feel when engaged in thoughtful meditation on himself, in view of the fact that he was created in humility but with a capacity for immeasurable growth in understanding and knowledge, in view of the truth that his unprejudiced rationalistic meditations gracefully led him to the conviction that he has a principle within him, an intelligent and immortal soul that constitutes him different from all other earthly beings and makes him feel his responsibility—therefore he can do no better than in worshipful spirit to adore God, who created him.

CHAPTER III.

THE PHILOSOPHY AND SCIENCE OF THE BIBLE; OR, RELIGION AND SCIENCE.

I. The character and nature of the Bible. Before entering upon a discussion of propositions it is thought best to introduce them by speaking a few words concerning the general character of the Bible. It is the most remarkable as well as the most peculiar book in the world, and in some of its divisions the most ancient. It certainly goes as far back in the treatment of subjects as is possible for any book, even to the creation. It appears to be not so much a book made as a book that grew. It may be regarded as a library, but a library of that particular kind which impresses the thought that it is a symposium of moral science and religious truth for the first four thousand years of man's history. It closes with this data, claiming that in religion it has furnished the necessary information for all ages yet to come.

The Bible is the connecting thought between the visible and invisible, between God and man. In illustration of its doctrine and truth it narrates some beautiful stories of both men and women, but about as many in the various colors of evil life. It often shows a great mixture of good and evil in a human life. Nothing is condoned, covered, or hidden. Truth is spoken, and everything is left exposed and to take care of itself. More than any other book it speaks the full truth, whether treating of general

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history or biography. Hence there is no discoverable intention anywhere to make a hero of any one. Men are dealt with in their true character. Wherever a life appeared beautiful, the Bible undoubtedly gives a faithful portraiture of character, without the purpose of praise. And thus it is with all, whether of good, bad, or mixed character. There is no sign of prejudice that would disguise the truth in the whole narration.

Of course the Bible deals with civil commotions, wars, and battles. Yet no book ever written is so free from human weakness in its authors. It is without gloss, comment, scientific treatise, or philosophical disquisition. Whether the Bible be regarded as inspired or not, it nevertheless shows a peculiarity and faithfulness for truth unknown in any other book. The Bible is peculiar because:

I. In all its various history and teaching it keeps one Being, God, constantly before the reader. It is his spoken word to man as much as is the earth, the sun, the moon, and the stars. His great Personality cannot be escaped in reading any part of it.

2. It is the talking word between the invisible and the visible, between mind and matter, between God and man. It is the necessary voice that comes out of the invisible, and is wisdom, authority, and law to the visible and intelligent world.

3. All things of doctrine taught are assumed as axiomatic principles or truths. There is no intentional labor to prove anything, although it deals more largely than any other book with the metaphysical, with God, angels, spirit, the soul, mind, will, and unseen habitations. God and his attributes

are its axioms, its own data are its postulates, the whole is a suggested theorem to man.

These are only a few brief statements of the Bible. It may be inquired why these peculiarities? The answer is contained in one word: it claims God as its Author, and therefore that truth is spoken. If truth, it needs no proof in the ordinary processes of making demonstration. Much of its historical peculiarity arises out of changing customs and manners for a period of four thousand years. Its chronology is as good as any. Its ancient genealogical tables, presented with such simplicity, accuracy, and historical skill, are incomparable and a great wonder. ancient discovery of the rights of man and the early distinctions between right and wrong have been little improved unto this day. Various forms of government were tried by the clamor of the people; but there was always a branch of human mercy shown and a thread of reserved and natural rights preserved all the way from the Sinaitic theocracy to Christ. Then there was a declared dissolution of Church and State. "My kingdom is not of this world." The kingdom of peace under the authority of Heaven was then divorced from temporal kingdoms, with due notice that the Sinaitic union of Church and State was forever ended. From that time, under the lights that had shone, the responsibility of temporal governments was placed upon the shoulders of men.

But the Bible was long ago completed and stands as a proposition to man. Its authority is of God; its wisdom from the same source; its merit is handed over to human intelligence and experience. It is a freewill offering, sealed with blood, and the never-tobe-divided heritage of the world. Within itself it is the greatest proposition the world has ever had before it. As it is the product of ages, scarcely less than ages can give it full demonstration. Yet in this great proposition there are contained various other propositions. But they are of a secondary nature. Hence in the very beginning of the Bible, in the first sentence, two propositions of science and philosophy are submitted to the inquiring mind: the proposition that God exists, and the proposition that he created the heaven and the earth. The first of these propositions is considered in the chapters treating of cause. The proposition of the creation will now be looked after and will be submitted in the following form—viz.:

II. Has physical science made any discovery that disproves the Mosaic philosophy of the creation as contained in the first and second chapters of Genesis? This and other propositions that will follow assume this form of negation in order that the physical scientist may see more clearly the ground on which he stands, and that the Christian philosopher may see more clearly from what quarter and in what degree his faith is threatened. This is necessary, since illegitimate conclusions are talked of as though they were really demonstrated truths. Neither side of this question should have an ambition for more or less than the truth. Seeking for the truth should be an honest and unprejudiced inquiry. When truths are really found, they become the mightiest powers, for they disarm all antagonism and leave it utterly defenseless

thinking conclusions are too hastily reached and entertained, and therefore, for a time, close the gates of the understanding and of progress. This state of things may be produced by covertly putting more in the conclusions than is contained in the argument, or through prejudice or eager desire to destroy, neither of which is consistent with fair discussion.

Since the Mosaic account of the creation is so hoary-headed and has withstood the tests of so many centuries, it is assumed that there is nothing unfair to science in the statement of the proposition. The question is one of the greatest importance to the whole world. Since the Mosaic account claims the wisdom of inspiration, the validity of the Holy Scriptures as the word of God is largely involved. Science is simply called on to show whether it has discovered data proving that the Mosaic account is unphilosophical and untrue. It is a question not of surmise or probability, but of fact.

In this age of education, advanced thought, discovery, and invention there is a natural tendency to look upon the ancients, comparatively, as a people uncultivated, of mental weakness, and superstitious. Should this be accepted as true, and, at the same time, should the Mosaic account of the creation be authentically accepted considering the ancient date when that philosophy was first reported, it would be no mean proof that the account then given is really what it claims to be, a pure word of inspiration. Otherwise it would be of inconceivable possibility. With this view of the case, the ignorant and superstitious ancients would have been incapable of the invention.

In the investigation of the subject there are but

two main questions involved, chronology and manner, the time in which the creation was performed and the things that were first made. Before entering on any proofs, it is necessary in the first instance to put both the Mosaic philosophy and science in a proper light before the understanding. This is necessary because false claims have been set up for both the Mosaic philosophy and science. While advanced science, in a general way, appears quite modern, the Mosaic philosophy is very ancient, for Moses lived and wrote more than a thousand years before such lights as Socrates, Plato, and Aristotle appeared on the stage of philosophy and science. Yet before Moses the stars had been considered and philosophy had become more than a name.

The Mosaic treatise of the creation is very brief, simply a compendium of thought or knowledge. So far as history shows, it was long before the earth had been delved or the sides of the mountains and the cliffs of the rivers had been looked upon with a view of counting the number and age of the earth's strata. The Mosaic account, if separated from the idea of inspiration, appears as but a philosophical arrow shot at a venture. There was no worldly wisdom to sustain it. The greater wonder is, if it is to be regarded as an arrow of thought shot at a venture, how such wisdom happened in him that his philosophy has withstood the test of thirty-five hundred years, when everything else has proven evanescent or has been largely remodeled through advancing thought. His philosophy never came from Egypt, the country in which he was educated.

The Mosaic account of the creation is simply a

proposition of general and brief statement. It is embraced in the first chapter of Genesis, and contains less than one thousand words. They are but expressions of manner or elaborate work, and no proof is given except that God did it all. While days are mentioned as a method of counting, it cannot be proven that he mentioned or intended to teach natural days, because the work began before there existed a natural day; and indeed the greater work, that of creating the "heaven and earth," preceded the possibility of the existence of natural days. Natural days could be counted only after these had been created and set in order. Moses should be understood on this point in the light of reason. Nothing but reason can relieve the mind of trouble generated by the false construction of an author's intention and meaning.

Again, it is not to be assumed that Moses teaches that the sun, the moon, and the stars were not made until the fourth day. For this would be a contradiction of his former statement, when he says: "In the beginning God created the heaven and the earth." Moses never meant any more that the "heavens," the sun, moon, and stars, were created on the fourth day than he did the earth. He had already said that they were created together. It was simply a manner of referring back, and is of the same nature as that reference back to the creation as contained in the second chapter. Again, Moses sets up no claim that he has told all about the creation. He simply makes God the Creator, gives general statements of how things appeared in general relation, and is not particularly descriptive except in the creation of man.

Now a few words in reference to physical science

all wrong

and philosophy otherwise. They have never been able to invent a better philosophy of the creation than is contained in the Mosaic account. Science has investigated the strata of the earth, something that indicates times and age, but found nothing that materially militates against the Mosaic philosophy. Science has sought hard for the origin of man through the theory of evolution, but found nothing satisfying, nothing half as reasonable as the Mosaic account of man's origin. Science talks volubly about atoms, but it does not know what an atom is. It acknowledges that it must stop and guess, and has established its theory in the faith of what it guesses to be true. When divested of its false apparel, it has about as much faith, ignorance, and superstition in it as can possibly be in the Bible. If true science is knowledge, about three-fourths of that reported is not science at all. Science has discovered rules by which different kinds of matter are regulated and compounded, but it is made to stop at this point. It follows John Dalton and founds the atomic theory. It is a guess; for it is unable to look into the dividing line between matter and nothing, or between matter and an invisible something else, or even to contemplate the dividing line between the invisible something else and nothing. The materialist has no mind to think of the dividing line between the finest or least entity and no entity at all. He knows not what an atom is or that there is any such thing in existence. But it is unnecessary to indulge further thought in this direction. The Mosaic account of the creation is the question. Moses says: "In the beginning God created the heaven and the earth." Moses evidently

refers to the material creation. This is a chronology without a date. It is to be understood by this creation that it was the beginning of time so far as matter is concerned. It teaches that the earth, sun, moon, and stars were created at the same time. The time of this creation is unknown. Is there anything in science or in other philosophy than that of Moses which shows anything to the contrary? But some would object because God's name is in it. Well, let the materialist get his name out of it if he can. He must substitute something that is the equal, and that equal is God. But some would fix one date and some another. All are free to fix dates, but their dates will do no violence to Moses. He is not concerned with dates. He merely says: "In the beginning."

Moses next says: "And the earth was without form, and void; and darkness was upon the face of the deep. And the Spirit of God moved upon the face of the waters." Words could not be more aptly chosen to describe the chaotic condition of the earth. The other planets of the universe may have been once chaotic like unto it. This is only a description of the earth after it was created. Moses still fixes no chronology. It was impossible. No light could get to the solid body of the earth, for he says there was "darkness upon the face of the deep." Had there been inhabitants on the earth, they could have counted time only in darkness. Hence there was no need of fixing a date, and Moses does not, and therefore says nothing about how long this chaotic state lasted. Scientists and philosophers must admit this condition. They have made no discovery contrary to it.

Moses introduced the subject of the creation with a brief notice of the spheres of matter under the name of the "heaven and the earth," and, having alluded to the chaotic state of all things, begins now to speak more particularly and tells what was done each day for a period of six days. They are days confined to the earth. Whether they were really six natural days or periods of time is unknown. In Bible expression it is immaterial, for it speaks of days variously as encompassing periods of time. With Moses, who had such knowledge of and faith in God's power, it was altogether immaterial. There is reason to believe that the days mentioned held only a technical relation to the work that was done. For it must be considered that the Being who wrought in the creation is eternal, and that time in no sense can be associated with his nature and character. He does things in eternity, never in time so far as he is related, but time in the conception of his creatures. Hence the time mentioned seems rather to denote the divisions of the work, and is technically stated in periods of days to facilitate the human understanding. So when days are mentioned they should be understood as having no application to the Creator whatever, but simply a human conception.

It is now that Moses begins to speak of that human conception called time. He here shows the first step taken to redeem the earth from chaos. He says: "And God said, Let there be light: and there was light." It is not assumed by Moses that this was the first light in the universe, for he is confining his philosophy for six days to the earth. In the introduction to these six days he makes the statement as

to what God did in the beginning; but now speaks of six days especially for recovering the earth from chaos and creating the things upon it. Hence when God said "Let there be light" he meant that which never had been on the earth. Since the work is confined especially to the earth, it is hardly rash to supply what may be regarded as an ellipsis and read "Let there be light" on the earth. This cannot be regarded as doing violence to the word, but simply a structure for harmony. While God is acknowledged as the Creator of the light of the universe, in this instance it means a rifting away of chaotic conditions so that light might be on the face of the earth, which was even yet covered over with water and hidden in vapor. For in the preceding sentence it is stated that "darkness was upon the face of the deep." So it is seen that the first day's work was begun in darkness, but ended in day or light. The earth before was in such a chaotic condition that stars, moon, nor sun had any effect upon it until the dense and dark elements surrounding it were removed. even yet it was not fair weather, for the Mosaic account shows that fair weather did not come until the fourth day. Yet there could be day and night without seeing the shining sun, and there could be a natural day. So the first day was the time in which chaotic conditions were so far removed as to distinguish between day and night. All this is so stubbornly in keeping with the ideas of present day evolution that it seems almost to catch its spirit. Therefore it seems that material scientism has no ground for urging an objection. Why do not natural evolutionists recognize the scientific Moses?

At this point it is needful to notice that special statement of scripture contained in the twentieth chapter of Exodus which says: "For in six days the Lord made heaven and earth, the sea, and all that in them is." In this statement Moses is in perfect harmony with his philosophy in Genesis. He speaks of the heaven, the earth, and the sea comparatively. These are the parts that are concerned with the six days' creation. But it might be suggested by some one that "heaven" in this statement means the starry host. By no means, for the philosophy of Genesis explains this point. In order that it may be well understood what is meant by the word "heaven" as quoted in Exodus it is necessary to quote from Genesis to find the explanation. And God said, "Let there be a firmament," and divided the waters which were under the firmament from the waters which were above the firmament; "and it was so." "And God called the firmament Heaven."

Since in Exodus the things appertaining to the earth are so aptly compared, and since in Genesis the created "firmament" or expansion was made and put in the midst of the waters of the earth in order to redeem it from a chaotic condition, and since it is stated "God called the firmament Heaven," the deduction is both natural and easy; that is to say, that the six days' creation mentioned in Exodus was the work of raising the earth out of its chaotic condition, and giving to the dry land, the sea, and the atmosphere their beings of life. Hence it is easy to perceive that the Mosaic philosophy is in harmony with itself.

The fourth day's creation has been a block of

stumbling to many, and especially to those who are less inclined to be philosophical than Moses himself. God has always revealed himself in a way adapted to the understanding. The philosophy of Moses has this peculiarity: it was adapted to the understanding of the people of his day, and yet contained a deepwritten undercurrent of thought that adapts it to the philosophical mind after the science of astronomy has wonderfully advanced. Had Moses written his philosophy of the creation in the light of present astronomical knowledge, it could not then have been received favorably, and God would have reduced himself to the level of a college professor, teaching natural science, which is contrary to his character and dignity. He intends that man shall make his own discoveries, but he makes known facts appertaining to his spiritual welfare.

Now in regard to the great and small lights and the stars appearing on the fourth day of creation, it was in harmony with astronomical knowledge of the Mosaic day. In this literal sense it was adapted to the thought of the people who regarded the earth as the largest body of matter in the universe. But that is not all, for it is in equal harmony with astronomical knowledge of this day. All that is necessary is for the reader not to be too literal, but philosophical himself. It has already been noticed that the earth was, after its creation, in a chaotic state, and when light was first produced on the earth that it was by dividing between and rifting away chaotic conditions; that there was sufficient light produced on the earth to distinguish day and night, but no proof of clear sky and fair weather. At the period

of the fourth day chaotic conditions had been removed, and the sun, moon, and stars, which had been created "in the beginning" with the earth, began to shine with round orb upon it. The Mosaic account is philosophy without an attempt to teach the science of astronomy. Heaven has never proposed to teach science, religion and moral science excepted. Moses gave the proposition for the philosophy of the universe. Only philosophical minds are able rightly to take hold of it and consider it. If science has offered anything in disproof of the proposition, it is hard to find. Loose statements and illogical inferences are of no value.

It only remains now to offer a few words concerning the order in which the things appeared or were made. It is repeated here that the days mentioned by Moses have no relation to God in his work. He sustains no relation to time. He only created, and did that creation in his eternity. There are divisions in all things he has ever made, for they are all things of time. The days themselves are divisions and things of time. Moses uses days to represent the divisions in God's work to accommodate things to the human understanding. Precedent and subsequent relate to time and not to eternity. Strictly speaking, God does not labor, rest, nor count time. He does not get tired nor sleep nor worship nor need a Sabbath day. He studies no problems, contemplates nothing beforehand; but is perfect, and therefore precision itself.

But speaking of the order in which things were made, science properly can find no fault. It is true that science has beautifully carried its paleontology deep down into the mysteries of the earth. It has found that the beginnings of existences were exceedingly insignificant, that there was a gradual improvement in forms and kinds; but in the midst of it all science has its own puzzles. It sees the forests that made the coal beds of the earth disappear. It sees the strongest creatures of the earth only in their imbedded remains, the silent voices of a former existence. All that can be said is that the conditions so changed as to render further existence impossible. Yet all is allowed to science that is justifiable, and the whole intelligent world is glad for the research and all truth that has been uncovered.

But what has science found, or what does paleontology exhibit that contradicts or unsettles the Mosaic philosophy? It is true science shows some first beginnings of existences passed over and not mentioned by Moses; but this is not sufficient to disturb the account of the creation he gives, for he begins with the least of the things he mentions and climbs up to man as the last, a truth which paleontology illustrates. Moses passes over anything that God produced in the chaotic condition of the earth, and begins after the waters had been divided from the waters and the dry land had appeared. On the dry land he puts them in the order of grass, and then seed-bearing herb, and then the fruit tree. Moses passed over what have insignificantly appeared in air and water until the fifth day, and begins with a general statement of marine and aërial creation. Not sponges, corals, and crustacea, for it was the fifth day. He speaks of things corresponding with that period: fowl flying in the air, "the waters bringing forth abundantly" even "great whales."

In the first part of the sixth day, passing over all else, Moses spoke of the dry land animals suitable to man's age. Among the things mentioned are "the beast of the earth after his kind and cattle after their kind." In thinking over the Mosaic account of the creation, it seems wonderful that the discoveries of science are so closely allied with it and how truthfully it upholds. The only thing necessary is to take Moses philosophically as God's spoken word and science in its known truth. Then let true science pursue its research and bring to light as much as is possible the things that are hidden, for there is a prophecy in the air that, while science may prove a remedy for certain superstitions in religion, it will yet become a great sustaining prop to the truth of God's word.

III. Has physical science made any discovery which disproves that man has an immortal soul? In a proposition like this science might ask whether it has yet been proved that man has an immortal soul? That is, that something must reasonably support a fact before it becomes necessary to offer anything in disproof or to show any discovery unto that end. The answer is that no absolute demonstration has ever been made of the soul's immortality. It is impossible, because there can be no intelligent consciousness of its existence after the death of the body. If there were a rational demonstration, it would be the end of debate. Yet there is large and reasonable evidence of its existence after death in the way of logical inference and otherwise; also that the peculiarty of intelligent and moral life in man is strong evidence that the soul is, as a thing per se, incapable

of mutation, and therefore cannot die or be annihilated. Belief in the soul's immortality, founded on existing evidence, is a verdict so general in the intelligent world, as well as among the ignorant, that the truth of it should be set at rest unless science can offer as much evidence in disproof. Hence the proposition, and science is called for the disproof if it has anything to say. Science is not called on to express a mere skeptical opinion, for the materialist is established on that ground; nor is science called on to state an inference that is full of doubt, but to show something of the nature that has in it the proof that it is impossible for the spirit of man, or his soul, to continue after the death of the body.

There is a loose, but false, idea prevailing that the soul's immortality is the superstition and delusion of the ignorant. Never was anything more hypocritical and false. On the contrary, the immortality of the soul is among the most intelligent of ideas. It belongs to the realm of intelligence, and was imposed into the human thought both by the wisdom of heaven and the highest circles of intelligence among men. As to the status of intelligent, thinking people of the present age, environment and proconceived opinion, without the warrant of considering data, have had their influence. As to the unthinking, ignorant, and superstitious, they follow their ideals.

It is unnecessary in this age of general literature and intelligence to put in catalogue the universal consensus, ancient and modern, showing that mankind always have, even as they do now, assented to the truth of a future existence based on the soul's immortality. The thought has been the heritage of the ages, and has been meagerly disputed and never successful in any quarter. Without raising the question of source, as from whom, when, where, and under what circumstances the world got in possession of the idea of the soul's immortality, it is enough to know that it has the idea now as it has had it from time immemorial; not in one quarter or among half the people, but throughout the whole world, among all people, of both high and low degree. There is no need of a missionary to teach the idea anywhere, and never was so far as history shows. It is an accompanying thought with humanity whithersoever they have gone and colonized.

It is true that much ignorance and superstition have marked the pathway of man, and much crude worship and various imagination. But amidst it all, whether tribes and nations were ignorant or intelligent, there has ever been an unabating tenacity of principle that has clung to the doctrine of the soul's immortality. It seems to be natural in their thought and culture. There have been persecutions, Christian and heathen, and religious wars involving many questions of doctrine and faith; but the world, whether heathen or Christian, has never lifted a hand of authority against the doctrine of the soul's future life. It has been so much the heritage of all and the belief of all that it has ever been the quiet question in all persecutions, religious wars, and the rising and falling of empires.

The world differs, and from time immemorial has differed, on many features of religious thought. About these there has been much debate and con-

fusion, but the pages of history do not show that the soul's immortality has ever been a disturbing question of debate. It is the acknowledged proposition of truth among all religions and creeds of religion. And outside the pale of churches, synagogues, mosques, and temples it is equally confessed and upheld as a universal truth. It is the thought of the mind, of the soul; and, like the soul itself, will not die. It is thought above the beast and things that perish, a thought that comes out of the invisible man, out of the invisible mind of the soul, telling man in his material complications that there dwells within him an immortality.

But science, while it is unable to offer any reasonable disproof of the soul's existence and immortality, would ask to see the metaphysical question of that entity further investigated and explained. Science may not be satisfied with general human assent to the truth, nor even be quiet with Scripture declaration. This leads to that fundamental and basic inquiry into human endowment; not education nor improvement nor refinement nor anything that is added to man through the influence of environments, but the faculties that are cognate with man's being and without which environment could never change him from being a beast. It is to consider that endowment or those faculties which differentiate a man from all known material existences. It would not be proper argument to compare the most degraded of mankind with the most improved of the highest species of the lower animals. This kind of argumentation has been often indulged, but it leads to false conclusions.

It is well known that man differentiates very materially from the highest type of the lower animals. He improves his language, makes language when without, invents and makes use of the most complicated machinery, solves intricate problems by a systematic course of thinking, counts the days and years, studies astronomy, and invents to help his vision, navigates the ocean, and founds States and empires under a system of laws. Nor is this all nor the half of all. He feels the responsibility of a moral life, and therefore thinks and investigates for right and wrong; he improves without ever being able to reach the end; he feels his need and calls on the universe for help; a prayer is in his soul, whether he acknowledges it or not; he thinks on life, death, a future state, and of God. These are only a few things mentioned that differentiate a man from the highest type of the beast.

It may now be asked, Why all these differences and a thousand more that are not put in this catalogue? The answer is that they are an endowment in man, or have grown out of a endowment that no beast has ever received. They cannot be taught to beasts, nor can beasts ever learn them or gravitate to them. They are man's department of being, his endowment. The line is drawn. Faculties do not come by culture or education. They are as certainly a creation as any part of man. Faculties or created endowment are the trouble with the natural evolutionists. They talk of a lost link in physical form, but have never found it. It would be a small matter even if they should. It would only lead to a greater task, in which they would undertake to find something that is im-

possible. They would find their impossible task in seeking a link similar to man in its endowment and faculties. The world wants no aping and mimicry. It wants sense, philosophy, and reason. It wants, in the thing called man or next to man, a reasonable sign of man's special endowment and faculties.

It is on the ground of this differentiation and nobility of man that the idea or truth of human soul is founded. It may be seen that man's powers of thought and calculation are not features of his flesh or of mere animal life, but that they belong to something else. A thing of such power and wisdom is entitled to longevity, to existence when its temporal, material frame and mere animal life have gone to the dust as things of mutation. But a mind, a soul, or thinking principle in man can be conceived only in unity. If it perishes, how? Who can tell of its mutation? What will this part be called? And what will that? Soul, soul one substance; mind, soul and mind one substance and inseparable. But it will die. How? But it is annihilated. Inconceivable? But it was nothing anyway. That is a rash end of the argument. Scientists talk of the immutability and indestructibility of an atom. Why not talk about the immutability and indestructibility of that greater unity, the human soul?

This brings the thought to the consideration of man's creation. How different appears such a creation from all else that was made! How different the circumstances, and how different the movement of the divine hand! "Let us make man." There is no such expression when God created the beasts, the cattle, the fowl, the lion, the monkey, the horse, and

great whales. The expression is: "Let the waters bring forth abundantly." Let the dry land bring forth abundantly is also a reasonably included idea. Thus unceremoniously all other creatures than man were made. "God spoke, and it was done." And even in the creation of the inanimate universe there is nothing revealed except a command and the existence appeared.

But in man's creation there was ceremony. A work was to be performed like unto nothing else. Mind and immortality were to be joined with matter. Not the mere unreasoning life of a beast that is subject to mutation and death, but a created soul with mind that in some feature resembled the uncreated and eternal principle. Not eternal, but made in time, and to be everlasting. This soul with mind was put into possession of a most exquisitely formed material body or lens for intellectual perception. "All flesh is not the same kind of flesh." Man's body and flesh differ from the body and flesh of all other physical beings. It is a body, flesh, brain, and nerves vastly differentiating from all other animals. Neither the gorilla, champanzee, nor monkeys of whatever kind can obtain such a body, flesh, brain, or nerve. They are man's absolute possession, and necessary for intellectual sense perception.

"And God said, Let us make man in our image, after our likeness. . . . And God created man in his own image, in the image of God created he him." What strange language is this concerning a creature made! If this image applies to the exquisitely formed body, there is no idea of immortality either included or to be understood, for material

images are mutable. Nothing is more ungenerous in argument than to state that the material body was the image; nothing is more unphilosophical. The image does not consist in mere life; if so, all living things are in God's image. Then in what does the image consist? Evidently in that which differentiates a man from all other creatures of the earth. It consists in his endowment of soul and mind or (may it not be said?) of spirit and mind. There can be no conception of mind except as it is connected with spirit or soul. The mind of God is always conceived as related to the spirit of God. The image, then, must surely consist in spirit or soul and mind. But God is everlasting; therefore the image, the likeness, of him is everlasting. Man is that image; therefore man is everlasting, immortal.

Mind was the uncreated, the original. But mind and spirit dwell together, not separate, for mind is a quality or attribute of spirit. Such is God. Man made in his image is like him. Hence man is a soul and mind together. But God is not mutable; therefore man is not mutable—that is, his soul and mind are not. God cannot perish. Man with spirit and mind like unto God cannot perish, and is therefore immortal. It is true the soul and mind of man were created, but they are like God. They are in his image. If they are mutable and perishable, they are not like God. They would not be in his image.

But some one would say that knowledge, righteousness, and holiness constitute the image. They are qualities or attributes of the image and represent the image in its character. The material man could possess this character, but not the true image. The true

image was created a personal entity. The character and qualities appeared because they were necessary sequences of a positive image entity. God is an entity. He is spirit with mind. Nothing else is known. Nothing as an entity can be like him, in his image, except spirit and mind. Man is endowed with spirt and mind; therefore man was made in his image.

These references have been made that science may see some of the evidences that man has an immortal soul. The subject has been treated philosophically, whether with reference to the Holy Scriptures or otherwise. Man has been found in possession of an endowment that science has been altogether unable to account for. As a borrowed idea, not of science, it is called an immortal spirit with mind. The Scripture account of the creation of man furnishes the key that unlocks the door of the hidden mystery. It confirms the truth that science cannot help holding in suspicion that man has an endowment, the gift of the Creator, an immortal soul; something across a bridge that science has never spanned; something that has no connecting link uniting it with any other earthly creature. This is the reason that man alone can hear God, think of God, and feel self-condemned when faithless and disobedient.

Now, since religion, both in philosophy and in the Bible, has reason for its faith, and since it has such evidence of the immortality of the soul, science is permitted to put in its bill of complaint, file its objections, and bring up any disproof in its own wisdom. The intelligent world will not be satisfied with a threat. It disapproves ridicule and false charges

of ignorance and superstition. It would have knowledge, or at least a good foundation for its belief. The immortality of the soul thus stands, and science should be dumb unless it can offer disproof on evidence of equal weight.

The foregoing argument, in a large measure, may be reduced to the following syllogism: All beings endowed with qualities like their Creator, or in his image, whether pure spirit or spirit incarnated, are immortal. The soul of man is an incarnated being endowed with qualities like its Creator and in his image. Therefore the soul of man is immortal.

IV. Does material science produce any evidence showing that man is rising out of a low degree of creation to a higher, any more than it shows that he is rising out of a sunken degradation to the high level of his creation? This proposition involves the question of the truthfulness or fallacy of natural evolution. The mutation of species or the so-called science of evolution seems to have given satisfaction to certain minds called great; and on the ground that they have spoken with authority, and their testimony has been received with respectful consideration and deference, many people who were believers in the Bible account of man's creation have grown nervous and shaky, being seized with great fear lest the Bible account be proven a fable. But really nothing has been discovered up to this day and proven that is seriously alarming.

All men should have a philosophical turn in their thought, let patience do her perfect work, and suffer alarm at nothing that appears. One thing is certain: the intelligent world will grow more and more con-

sistent about truth, and will more and more correct the tangent lines from it as a center. This is the mission of pure education: to learn and know the truth. That is what general intelligence is for; that is its true meaning and operation. A certain quarter may render a verdict, but the whole world sits in judgment. Discovery and invention have brought the world face to face, and in such easy daily communication that a universal, intelligent consensus is easily and quickly obtained and erroneous thought detected and strangled before it has time to build strong castles.

The world is growing more generous-hearted, less dogmatic, seemingly in a great hurry, but with much patience. It is becoming more philosophical and tolerant both in its treatment of science and questions of religion. Everywhere scales have fallen from the eyes and vision been made more perfect. Certain old theories of science and religion have spun around, had their day, but now no longer gyrate. Inconsistency is gradually yielding to consistency, and fallacy everywhere is giving out sure signs of great reformation. The world is growing weary of theories and vague speculation. It is now in love with truth more than with declamation. It wants logic first, but has no objection to beautiful banquets of rhetorical flowers in unelongated speech.

As to natural evolution, it contains its own truths and is entitled to merit for all the truth it possesses. The world is wiser with the knowledge that has come of all its researches. All people should be believers in natural evolution so far as it has made discovery and found positive truth, and even in so far as it has

found truth supported by evidence beyond a reasonable doubt. At first, in the heat of discovery, evolution, like every other new invention based on a probability, straightened itself back with presumptuous dignity, grasping a measure of conclusions which, in cooler hours of meditation, it has found were altogether unwarranted. It has been unable to find that life was ever a spontaneous generation. It has been unable to prove how man has appeared on the earth, even in physical form, by relation to other animal species. And there is a greater task before it than all that is behind. This is a subject not yet approached. Evolution has not yet led up to it. When, if ever, it gets to it, the human mind will be the great question. It will be put to the necessity of proving how this wonderful endowment came into existence. It has within it questions of insuperable difficulty. The world wants the truth, is not afraid of the truth, and, with whatever is found to be the truth, should be content. Whenever truth is found, everything else is made to stand around as best it can. Truth is unconcerned about other things which are not true, and is therefore able to take care of itself. A right angle is ninety degrees, no more nor less.

Evolution is the science of materialism. This science is skeptical of the Bible as God's revelation. It treats it as it does other ancient books. Evolution is belief only in so far as matter and its phenomena reveal. Virtually it makes matter the eternal principle and cause of all things. It is concerned with nothing but matter. It sees nothing but matter and the things matter has produced. According to evolution, all the invisible forces and life are the pro-

ductions of that which is seen. How different is this science from the philosophy of the Bible! The basic principles stand in opposite directions. The philosophy of the Bible teaches that matter appeared by life and unseen forces, whereas evolution teaches that they sprang from matter. Evolution begins with knowledge, the knowledge of matter, but runs into the territory of faith without making the proofs. The Bible philosopher begins in faith and runs down to where the evolutionist begins, matter and knowledge.

Now the question arises: Which enthrones reason, the Bible philosopher or evolution? Or in other words, which was the first principle, God or matter? Or since reason is forced to admit that some Being of the nature of God must exist, did matter make that being or did that Being make matter? One or the other must be true. It is a contradiction to admit both.

After this brief notice of evolution, the question of the general proposition recurs: Is man emerging out of a low grade of creation, or is he climbing back to the height at which he first appeared? Which is true, the doctrine of the Bible or the doctrine of evolution? The Bible account of man's creation is the old proposition of the world. It is unnecessary to repeat here the high order of that creation. It is unnecessary to again rescore the thought on the image man bore. The thought should be conducted on the ground that man deteriorated and sunk himself below what he was originally; that he did this early after he appeared; and this forms the ground why the thought of his low origin was entertained by the natural scientist or evolutionist.

This carries the thought to the philosophy of the Bible, which, outside of the fact that it is God's revelation, is as reliable as any historic data as evidence in the case. The story of man's transgression is told in simplicity, as is also the calamity that overtook him. It was before the race had multiplied, before it was necessary for man to exercise his faculties in material improvement, before there could be any show of art and literature. Yet he stood in his acknowledged endowment, clothed with dominion and authorized to rule the earth and subdue it. But calamity befell him. His Heaven-born faculties, perfect in their nature, were not destroyed, but rendered imperfect. He was driven as an outcast and made to "eat his bread in the sweat of his face." mind, now not so clear, was forced through necessity to exercise, to discover, invent, and, as far as possible, regain its lost power. Hence, not by creation but through calamity, man was forced to begin in a humble way. It is on this ground, so far as relates to man, that the evolutionist has built his mistake. Yet it is a history as clearly reasonable as any the world affords of ancient date. The discredit cast upon it by unbelievers is the reckless fallacy of opinion that nothing is true that has been handed down from ancient times. It is out of reason. There is no greater mistake. The genealogical tables from Adam to Christ bear the deepest impress of truth. This ancient history is no fable. The transgression and fall of man is history with the greatest mark of truth.

The scientist reads the Bible account of man's creation. He grants that if it be true man is of high

origin, and that under the increase of his kind he, from the first, would show the best of civilization. But then he turns his thought to the lowly condition of humanity, connects the lowest specimens of humanity with the best of the lower animals, fondly indulges faith, not knowledge, in what may be accomplished by mutation of species, fancies he sees man spring from the lower animals, attributes to him this low origin, feels a complacency in the thought, assumes the dignity that follows a fancied discovery, and says the Bible account is a fable. He calls this disproof that man had a high origin, but it is no proof concerning man at all. There have always been difficulties in the way of evolution, unsolved before man was reached. Evolution, whether looking upon the living or searching among the fossiliferous, has never found anything capable of changing its condition except man. Nothing else has ever improved. With them all there has ever been one uniform, stable condition. How there could spring out of such a nest a being such as man, a being so able to improve his condition, a being of such intellectual endowment and moral qualification, is a stretch of belief beyond any measure of faith exercised in the Bible. Yet evolution is a science concerning its own matters and should hold itself in proper restrictions. Indeed, it is a good rule that nothing grasps more than it contains.

Therefore the way the matter stands man is climbing up, not from a low origin but from the calamity which befell him through transgression. He is steering his course as best he can, through the "sweat of his face" and through impinging hunger and naked-

ness, for the crown that was lost. He acts as an uncrowned king, dissatisfied with his condition. That ambition that spurs him on is unaccounted for only in the sense that he feels a crown has been lost and it is possible to regain it. Hence, ever and unabatingly, he is seeking to make his condition better. It is true that many in hours of discouragement and blasted hopes fall by the way and increase their misery because the sight of the crown is lost; yet, ever and anon, the trend of human thought, labor, and hope is reaching forward to the day when the uncrowned head shall wear its crown again. Then will the recrowned man be satisfied, because he will have attained to the goal of his ambition. Then the sweat and tears shall be wiped away, and hunger, cold, and nakedness evanish, and the countenance be lit up with joy and laughter.

V. Has material science made any discovery that disproves the creation and existence of those immaterial intelligences called "the angels?" The existence of such creatures is most positively a Bible teaching, and therefore belongs to Bible philosophy. Their existence as a metaphysical question has no more difficulty in its nature than the human soul and mind. They are all alike invisible and beyond the crucible of human experimentation and observation. It is foolish to contend that all or even one-half the places angels are mentioned in the Bible are but allusions to people of the earth doing mission work. Such an opinion is undeserving of notice. The divine word so broadly and numerously teaches the existence of angels as some kind of unincarnated spiritual intelligences that the denial of their existence would include

the idea of general unbelief of the Bible. A belief in this Bible doctrine or Bible philosophy is founded upon evidence so strong that there can creep about it hardly a reasonable doubt.

In the first instance, let evidence be produced after the manner in which the evolutionist reasons. When he steps down into paleontology under the law of development he sees the coming man far in the distance and above any other earthly creature. He holds in his thought the mutation of species and sets up a claim for wonderful accomplishments growing out of it. The probability is that the thought is of right conception, but he blunders in his conclusions. Hence he labors hard to find something impossible. With his surveying eye he has looked upon all existing physical beings and dug into the bowels of the earth to find man's connected relation to the lower orders of physical beings. He thinks evolution will have accomplished its great purpose with such discovery. He desires to see the connected relation of things which is a thought of great beauty; yet it is only a thought. This is the way the evolutionist reasons. It is fair that it should have an application in the direction of angel existences.

Man stands in the tangibility of his material form the most wonderful phenomenon of all the earth. All eyes gaze upon him. Yet they behold only a specimen of organized matter. This man form has animal life in common with all other living organisms. But more: the man has mind and intelligence. These cannot reasonably be separated from some kind of spiritual entity incarnated in his wonderful and artistic body. It is spirit or soul that has life; mind and intelligence are its qualities. This is what is called the immortal soul with mind, and this has something to do with all bodily movements which involve intelligence and questions of right and wrong. From this beginning point God, the First Cause, lies away off in the distance. A step is made toward him from the spiritual or incarnated soul of man from this mind, dulled in its vision and weakened by its connection with matter. From this fettered and incarnated soul of man the first step is into the unincarnated condition of spirit existence. In this realm nothing enters the thought as a conception except that which is revealed, the angelic host. It is the realm of unseen forces, intelligent forces uncontaminated with matter. If intelligent entities are allowed to exist, it must be the revealed truth that they are those spiritual creatures called the angels. This is just as reasonable and as easily accounted for as the mind of man. There is no conception that it would require a different quality of mind and power to produce in either case. The wisdom and power that can produce the human mind that is known to exist is capable of producing the human soul that put it in a material body, and the unincarnated spiritualities called the angels.

But still reasoning after the manner of the evolutionist, what is the next step of approach toward God, the First Cause? The Bible is silent, and human conception is at an end. This is as far as man can go, and the revealed word assisted to this goal. But even as there appear different grades and powers among men, as is witnessed of all, so likewise the Bible continues its philosophy of revealed truth and

shows that the angels are of different grade and power. There are commanders among them clothed with peculiar power and authority. When believed, it is almost shuddering to think of such created intelligences as Michael and of Lucifer, though he be fallen; yet even such creation is not unreasonable when there is belief in God, an acknowledgment of his wisdom and power and the mysteries of all nature. Every field of gathered matter is not of the same size. Inequality is a feature of the physical universe. Inequality is a feature of the created things of earth. Inequality is a feature in man's kind. Inequality is a feature in angelic existences.

The philosophy of the Bible teaches that God is spirit. He did not make his spirit. If he made spirit, it was spirit different from his own spirit. It could not be spirit of his own kind. That is absurd; for if he should make spirit of his own kind, he would create something equal to himself which would render his own destruction possible. The thing made is always less than him who made it. Hence such master beings of creation as Michael and Lucifer among the angels are to be regarded small when held in comparison with the Creator; yet they are highest up in the scale of created intelligences so far as the Bible philosophy teaches, and this is the limit of human conception and of philosophical knowledge based upon testimony in this direction.

But like the evolutionist as he approaches toward man, a stopping place is found. There is no link of created things that directly connects creation with God. Archangel is the highest; yet it may be conceived that there is greater breadth between an arch-

angel and God than between the latent life that dwells in protoplasm and archangel. Likewise there is no link between man and any other creature of the earth connecting him with it. Man is altogether a different order of being, a king over all material being. True, he dwells incarnated in a body of matter, and therefore the humblest of his class of being; but his kinship is the other way on the ascending scale toward the angels and toward God, with animal life toward the beast, with spirit life toward angels and God.

The argument to be made now is by an inductive reasoning or an analogy from the things of the earth, introducing the idea of secondary forces or forces other than God immediately or through which the government of the universe and the particular things of the universe are carried on, and to show that there are forces that act not only on matter but on mind also, or rather perhaps on the spirit, soul, or the thing that contains the mind. It is well known that there exists a principle called gravity, and that matter is in the hands of that principle. The probability is that gravity is not cognate with matter. Various reasons for this probability would here be introduced, but they are forborne lest they should too much interfere with the proper connection of the present argument.

Allowing and acknowledging that God is the great force of the universe, there dwell, nevertheless, secondary forces of his creation and appointment that are related to and exercised in particular things. These are forces of life and forces of nonlife. Gravity is a force, but it cannot be claimed to have life.

So also with light, heat, electricity, and certain other things. Yet gravity can do no variety of work. It can only give weight to matter and centralize it if left free to move. Whenever there is mind, though it may be confined in a body of matter, it is so productive of variety of influences that it appears as a little cosmos within itself.

Secondary forces are powers created and appointed, and have continuity by the persistent hand that fixed them in their order; and they, in the nonlife relation, have the perfection and precision of the Creator. They have never exhibited a refractory nature. They must have these qualities or else they would be unfit to participate in the control of the material world. This is the reason of that precision in the march of the heavenly bodies of matter. The intelligent life forces would all have the same precision and were created unto that end; but, being capable of a variety of performances, it seemed good and necessary that they should have mind given unto them for adaptation. Free agency and responsibility are, morally, concomitants with mind. The work to be performed by such free agents was made largely to depend on the obedience of their will. But in all the arrangement of the universe the forces were so divided and placed that the great forces are directly connected with physical nature, and, since they have neither mind, free agency, nor will, but have within themselves the perfection and precision of their Creator, there can, as caused by them, never be a menace to the universal physical structure and arrangement.

Now by inductive reasoning, using man as an analogy, the thought and idea may be carried to the

angelic host not only as a creation for worshiping God and to have enjoyment in existence, but as a function in God's moral government; in what else, if anything, is unknown; but as really a function, according to the Bible, in the realm of spirit, mind, and intelligence as gravity and other principles of nonlife are functions in physical nature. Not with the steadiness of gravity, but as messengers or missionaries of various service in particular departments. Man is the great moral and intelligent functionary among the things of the earth, for it was said to him: "Have dominion and subdue the earth." Hence the earth has always been, morally, just what man has made it, and is likely thus to continue; for he is a free agent, and God works through him as a function in this sense. Man is never deserving of more in the earth than he makes the earth to him; and his future progress; comfort, and happiness on the earth depend on the measure with which he brings his will into subserviency to the will of Him who gave him his being and gave him his appointment. For in that high will there is perfection. This is the only way of gaining that precision which is characteristic of the functions of nonlife where there is no free agency, where there is, therefore, no mind, no will, and no refractory nature.

Seeing, then, that man, untractable and refractory as he is, is a limited functionary in God's moral government and that God works upon his spirit without a destruction of his will, the thought easily glides to the angelic creation which, under Bible philosophy, are used as functionaries in God's moral government, with this difference, however, from man; for they,

being spiritual and unincarnated, have business under appointment otherwise than among themselves. In the first instance the thought is turned to that class of angels that have proven themselves, have passed probation, or have passed to that stage of perfection in which their will is positively subservient to the will of their Creator. They have, therefore, in their character the precision and order that belong to the functionaries of nonlife. Being creatures of mind, they have adaptation, and are capable of service in a variety of ways and for numberless purposes. Some one might think that this is robbing God. Not at all. He is over all his work, and this shows his manner of executing the business of the universe; showing that mind forces in the moral universe are in striking correspondence with the nonmind forces that are acknowledged in the physical universe.

As to the might and power of the angels nothing can be believed only on evidence. The Bible gives the only testimony. The kind of belief here alluded to has the nature of all other belief, and stands according to faith in the witness. People's faith in a witness has always differed. The differences arise from different casts of thought, judgment, and prejudice among the people. That the world has the Bible, that it gives witness to the angels of their mighty power, and that they are reported as functionaries in God's moral government is knowledge. That it is all true is belief. That it is false is unbelief. That doubtfully it may be true or it may be false is agnosticism. The Bible, being a peculiar book, claiming a divine origin of thought, speaks of the existence of angels as a fact. It could not consistently do otherwise. It is a philosophy that gives the world a proposition to solve if the world is not satisfied with the witness. Like much of other philosophy and science, it would seem very odd if all should agree. Men have not always agreed even when no fault was found with the witness.

In the existence of angels there is nothing contrary to reason, though man sees nothing which he can declare their phenomena. Even should it be granted that the philosophy of the materialist is true, that life and intelligence are or can be generated by molecular action, it could not reasonably and consistently deny that through motion a living, intelligent entity unincarnated might fly out of matter. Yet it would be wonderful indeed. In view of it all, how even pure, unadulterated materialism can oppose the existence of the angels, or how it can frame a consistent argument against their existence without a reaction of the cudgel on its own system, remains for the advocate of that theory to explain.

The Bible does not propose to give the world a philosophy, and then in well-ordered scientific terms and argument make the proof of it. This would be a contradiction of its high origin. Indeed, the Bible does not mean to give the world a philosophy at all except in a moral sense. Yet, incidentally alluding to things related, it has given the world much philosophy which it can shape into propositions and use with its own methods of inquiry and discussion. The Bible speaks with such authority that the propositions are handled as though they were already solved. They were solved and stood as self-evident truths in the mind of *Him* who spake. There is nothing

said of the creation of the angels any more than of gravity or any other functionary, living or nonliving, in God's government. It is pure logic that leads to the conclusion that the forces in both the physical and moral universe were created and were made for purposes.

In this treatise nothing has been said about the things angels have done, on what missions sent, their forms and their ability to change their appearance, and a hundred other things that any tyro may learn by reading the sacred history that treats of them in the various offices they have filled. But enough has been spoken by way of argument in their cause. The main object was to speak of their existence philosophically. Not that the Bible needs this feeble vindication of this philosophical doctrine, but that some who have not well thought upon the subject may see not only the Bible declaration of angelic existences, but also the reasonableness of their existences. Now worldy wisdom is as free as in all the past to make its own display. If it can make any meritorious disproof of angelic existences, all should be satisfied with any truth that may be shown.

VI. Has evolution or science of any kind ever produced any proof that it is impossible for a man to mortify his animal nature and become spiritualized in thought, or, in other words, that he cannot be "born again?" In comparison with all other animals, there is something striking and prepossessing in the form and bodily conditions of man. Erect, with eyes set directly to the front, denoting precision, and on a horizontal line between the earth and sky, with firm step and unwabbling gait, he foretells in his mien

before action that he is not altogether animal. him, as an outward sign, there are no tusks and protruding jaws of viciousness, no hooked beaks and talons for rending, no wings and legs for rapid flight from danger. He is the embodiment of courage. As a rule he is naked, and looks to be the most helpless among the things of the earth. His lack of the enumerated qualities denotes that he has other qualities and resources on which to draw as a supplement, or else his chances for survival would be at a discount. He wears the aspect of a being more meditative than ferocious. As a mere animal, considering his nakedness and defenselessness, he never could have populated the earth. Yet he lives calmly in the midst of cretures far stronger than himself, and without fear, for he is easily master of all.

It is other than animal qualities in man that cause him to exhibit the nobility of his being. Hence he is not always found thinking of himself as to how he may easily live and have plenty, for this is a pure animal nature; but often he thinks of himself in the light of moral character. While he is gaining sustenance along with and in liking to other animals, the thought recurs as to the rightness and wrongness of his manners. As a mere animal such a thought, were it possible, would be a curse to his being; but as man he grows meditative under its influence, although even to him it is often a perplexing annoyance. This introduces the thought to the truth that there is a warfare in man. It is the strife between the animal nature and the mind. The animal nature would pull man to the earth along with the other animals, would keep him helplessly embarrassed

with their natural propensities, and would sear him into unconsciousness of guilt for any of his manners.

But the mind and reason of man are disposed not to suffer such manners as the animal nature produces to be passed by unchallenged and unrebuked. In much of animal nature the mind works in opposition. It is a warfare, a contest of hard struggle. It presents a picture deplorable. It awakes a sorrowful feeling on beholding that such is man—the one pulling him down and holding him down as a beast in manners; the other, often the weakest in the contest, laboring to pull him up. The mind declares he shall be up, the lower propensities declaring, at the same time, that they will have satisfaction.

If a man conceives that he is alone, and that there is no source to which he can appeal for help; if, in the hour of his extremity, he goes out in single combat to make war against the ruthlessness and tyranny of his animal nature, to curb, restrain, and subdue his evil propensities—he presents a beautiful picture in the eyes of all good, is to be commended for his courage and praised for all that he accomplishes in his single combat. But how often has man thus hoped against hope! How often has he retired from the contest in defeat, leaving his animal nature still dominating the better complaint of his mind!

The old Greek philosophers are to be admired, when they could appeal to no higher source than Jupiter, for their great and seemingly tireless effort to put the mind in full authority over the evil propensities of animal nature. Yet their battle must have been a sad failure, for Diogenes, the cynic, in the time of greatest Greek light, rebuked the whole

city of Athens when, in open day with lighted lamp, he presented that scene of hunting for a man. He had a conception of what a man ought to be, but could find no one approaching his ideal, no one whose mind had sufficient control over his animal nature.

Men, not merely the things of physical being, are what the world has needed in all ages. It is what the world needs to-day—men whose minds and reason are not dragged down by the evil propensities of nature and humbly trailed in the dust; men whose minds are not conquered by anger, malice, envy, avarice, covetousness, or any other quality of lower nature. The world has had experience enough with the kind of men that have filled it. It needs the new man, the man that has attained the new birth, who has so been born again that the animal nature is dominated unto its mortification, and mind and reason are exercised in the light of their unembarrassed liberty.

The question rises: Is there a possible deliverance of man from such a deplorable condition as has been described? Is there to be found aid in the universe anywhere to raise him out of his helplessness? Or must he forever be in this warfare of mind and animal nature, and, more often than otherwise, have his nobility dragged and trailed by the propensities of a lower nature? Is it the judgment of worldly science and philosophy that man legitimately has no appeal, that he is limited to his own powers and resources? Why this judgment? Why this condemnation of those who claim the right of appeal? Why this derisen when man, seeing accurately and with precision his helplessness, inquires into the secret chambers

for help? Why this cry of ignorance and superstition, when it is claimed that God will hear the cry of his intelligent children? Is such opposition not narrowness? Is it philosophical? Is there not some one who hears the cry of the parched ground and everything that grows and has life? Who feeds and nourishes even the smallest of things? How much more will he hear and help when he sees man stretching every nerve of brain and moral nature to rise to excellency while embarrassed perpetually with the disposition and propensities of an evil nature!

But a philosophy has been spoken unto the world that explains how man may obtain his release and his mind find its liberty. It comes from the highest source that philosophy has even been spoken to the world. It comes clothed in the reason even of materialism itself. For if it be granted that materialism has produced man, it is seen that it has produced helps for him. It has not left him alone in a fatal miserableness of distress. It beforehand heard his cry of distress and provided for it. It daily hears his cry and brings him the harvest and fruits of the earth. But materialism is impossible; yet the cry of man is heard. His moral nature is in need as much as his physical. It equally needs a nourishing help. If the physical man would perish without harvest and its fruits, so likewise will the moral qualities of man fade away in combat with animal nature unless fed and maintained from the same source that brings "seed time and harvest."

It is Christ, who is the Essence of all true philosophy, that has spoken for the release of man. It is contained in a simple sentence spoken in the dark-

ness of the night, indicating the intellectual and moral darkness of the world. How simple the utterance, and yet how full of meaning when the Master said to the inquiring Nicodemus: "Ye must be born again!" How suitable the ocasion when, surrounded by his disciples, he holds darkness and light in their strange contrast to instruct the running, confessing, and inquiring Nicodemus! It was as much as to say: It is dark now, but there will be daybreak and sunrise in the morning. The mind of man is darkness now by the influence of a reigning animal nature; but the new birth will give daybreak and beautiful sunrise to his intellectual and moral being. It will bring liberty to the mind whose judgment is always against contentious, powerful, and corrupting nature.

The doctrine was new to Nicodemus and all the world; and he, speaking for the world, asked: "How can these things be?" The mind of Nicodemus, even as the minds of millions unto this day, was clouded and embarrassed with materialism. He says: "How can a man be born again when he is old? Can he enter a second time into his mother's womb and be born?" Nicodemus, as a material scientist, could see no farther than the phenomena of matter and the birth of a material being. He had been trained, as some are to-day, to look upon matter as the greatest thing in the universe; whereas it is small, weak, and helpless. Although a member of the orthodox Jewish Church, the Sadducean faith no doubt, in a degree, had corrupted his thought. If matter, as he thought, was the greatest thing in the universe; if there be no angel, spirit, or soul—he lacked the culture and conception that could revolve the metaphysics

and mystery of being "born again." Nicodemus recognized the Great Teacher, and declared him sent of God. He did not, with Jewish prejudice, declare the new doctrine impious, but asks in wonder how a man can be "born again when he is old."

The doctrine of the new man of the earth was clothed in a new verbiage. "Ye must be born again." The earth must have a new man, a man like Adam before he became a transgressor, to whom it could with propriety and justly be said: "Have dominion over the earth and subdue it." The time had come when the old philosophies should shed off some of their ungenerous opinions and step out into the daybreak of moral intellectualism. The invitation was not to transgress the law of reason, but to establish reason. It was an invitation to look upon the moral universe as well as upon the physical; that the moral had equal claims upon man. It was the doctrine teaching man that he was heir to another birth, that the natural birth did not qualify him for "dominion over the earth." The history man has made in the earth stands as a great rebuke to him, and tells in the light of reason that he has always been in lack of certain qualification. He has long been trying to correct himself through education and worldly wisdom-with what success, history shows. After all the oppression, blood, and failure, the humble philosopher of Galilee teaches that the earth needs a new man. "Ye must be born again."

To Nicodemus Christ spake of two births. To science and philosophy, they must be equally mysterious. "That which is born of the flesh is flesh; and that which is born of the Spirit is spirit." In a birth of

the flesh the phenomena of matter is witnessed, but unexplained. In the birth of the spirit the phenomena of the new life is witnessed, but the birth unexplained. There is something created or new in either case. The power that creates the growth and natural birth and the power that creates the renovation of spirit or soul are equally mysterious. The phenomena of a physical man conveys the thought back to his birth, and the phenomenon of a man upright in all his ways conveys the thought back to the change wrought in him, or to his spiritual birth. The spirit or soul of man contains his mind, and they direct and control his bodily manners. It is called a spiritual birth because spirit is in control, because spirit is really the man. God is spirit and mind, and he corrects, improves, changes, and gives the new birth to man by operation on his spirit and mind. When Christ says, "Ye must be born again," he puts spirit and mind over the physical man, and leaves the materialistic philosophy to take care of itself.

If the theory of evolution were true, it could not stop short of a new birth in the man species. Such is its idea. It contains an infinity of conclusions reaching unto the gods themselves. What its conception of the new man of the earth would be is left for its advocates to explain. But Christ, in the simplicity of his doctrine, takes the same man of the earth, consults his reason, talks to him as a philosopher, and says: "Ye must be born again." He labors with man's spirit and mind, and seeks to get them right in the first instance. When these are made new, "born again," they, being masters of the body, will make it in manners as perfect as themselves.

This is his philosophical way of making the race of man new in all the earth.

The apostle Paul is a fit illustration of earth's new man. He says: "When I was a child, I spake as a child, I understood as a child, I thought as a child: but when I became a man, I put away childish things." This man Paul stands the peer of any that ever outgrew his childhood. Ever after the day he saw the light that smote him to the earth near Damascus city he was one of earth's new men. It was then that Paul began to realize what Christ meant when he said: "Ye must be born again." Observation and history prove that the men of the earth have always been too much disposed to carry childish disposition and manners with them unto gray hairs and to the grave. Earth's new man under the light that shines through Christ will, as Paul did, "put away childish things."

Men will be "born again" when they are old or physically grown, and many a bewildered Nicodemus will open his eyes and see the moral phenomena of life and character, all pointing as index fingers to the doctrine of Christ, and proving that the earth has its new man. The state of the new man of the earth will be like the composed state of Abraham's mind when he said to Lot: "Let there be no strife, I pray thee, between me and thee, and between my herdmen and thy herdmen; for we be brethren. Is not the whole land before thee? separate thyself, I pray thee, from me: if thou wilt take the left hand, then I will go to the right; or if thou depart to the right hand, then I will go to the left."

Paul was a man whose mind dwelt in the wisdom and philosophy of his age. He defeated the Stoics and Epicureans at Athens, and almost unconsciously to them introduced Christ as their "unknown God." He was able to meet the strongest philosophers of any theory. His mind was trained in metaphysical questions, and he was a close student of how the mind and animal nature strove and made war in man. went as deep into the philosophy of human nature and mind as the world stands to-day. Looking upon the natural man, who knows nothing of being "born again," and giving full credit to reason, he says: "I delight in the law of God after the inward man: but I see another law in my members, warring against the law of my mind, and bringing me into captivity to the law of sin which is in my members." Here he shows that the mind has not sufficient power to subject the animal nature. In other words, that if the mind is left alone in the contest the earth cannot He shows that the earth produce the new man. cannot produce the new man through the force of He takes one of earth's men, with his natural propensities, and places him under law. He sees that, while the law has not changed the disposition and nature of the man, it declares him a criminal for its violation, apprehends and punishes him. Yet the judgment of the mind is that the law is good notwithstanding. The mind conceives that it is the only way to have society and security in the earth, although it be itself a way of prison and death. Paul then shows how the natural man stands under the law. He lets him speak for himself in the first person. Hear his speech as bound under the law. Hear

the contained acknowledgment that the law is good and his punishment righteous. "For that which I do I allow not: for what I would, that do I not; but what I hate, that do I. If then I do that which I would not, I consent unto the law that it is good. Now then it is no more I that do it, but sin that dwelleth in me. For I know that in me (that is, in my flesh) dwelleth no good thing: for to will is present with me; but how to perform that which is good I find not. For the good that I would I do not: but the evil which I would not, that I do. Now if I do that I would not, it is no more I that do it, but sin that dwelleth in me. I find then a law, that, when I would do good, evil is present with me."

This description of the natural propensities and contentions of the animal man and the warfare of the mind has never been excelled. It is a proposition as to which shall rule the life of man, the judgment of the mind or the animal nature. Temptation was never presented in a fairer light. When there is no law, the contest and rivalry exist. When there is law, the evil nature becomes excited to greater effort. While there is necessity for law, though it justly condemns to prison and death, the evil propensities remain untamed. Such is man unless he is made anew. Such is man as Christ saw him when he said to Nicodemus: "Ye must be born again." "That which is born of the flesh is flesh." Paul says: "For I know that in me (that is, in my flesh,) dwelleth no good thing." Does not the word "flesh" here include the whole man, even his spiritual attaintedness and death? If he were really a man in the full, living expression of spirit and mind, the warfare of animal propensities could give but little trouble.

But the man whom Paul put under the law to speak in the first person now makes a survey of the whole field of unaided human effort. He looks upon the law, and finds it incapable of bringing relief. He looks upon all human resources, and finds nothing that can slay or drive away the annoying propensities of animal nature. He finds that mind itself, though giving judgment against them, is incapable. When he can flee to nothing on earth for help, in the hour of distress and approaching despair he cries out: "O wretched man that I am! who shall deliver me from the body of this death?" In the stillness of the hour a voice is heard that the earth can have a new man. It is contained in these words: "Ye must be born again." The man then, recognizing the power of the voice, sees that his only chance is to be born out of his trouble, and exclaims in the ecstasy of his soul: "I thank God through Jesus Christ our Lord." "Eureka."

CHAPTER IV.

CAUSATION.

Causes Secondary.

I. Since the days of Aristotle causation has been a constant and interesting subject of inquiry among philosophers. That progress has been made is true, vet it must be confessed that much doubt remains. Among the evils that have hindered progress and confused the understanding, it will be assumed that too many things have been taken and treated as causes. Some things have been treated as causes which, under the scrutiny of strict reasoning, lose all the aspects of the nature of cause. The error that has almost uniformly been committed, as it seems, has been a lack of perception or a lack of acknowledgment that it is the nature of cause not only to initiate but to remain constant in the evolution toward production until the effect stands substantially a thing itself. In the nature of cause the idea of compound leverage is too easily omitted. With the thought and judgment placed in this direction, it may easily be seen that things which have intruded under the name of causes are no causes at all, but simply a line of effects. There is to be made, or ought to be made, a distinction between cause and the details which the cause itself really and constantly In a final sense, whatever may be said about intervening causes before the effect stands, there exists but one purpose, and it a continued purpose, until the effect of the purpose is produced. But more of this in another place. Let definitions be first in order. (++0)

Webster says: "Cause is that which produces or effects a result; that from which anything proceeds, and without which it could not exist." Locke says: "Cause is a substance exerting its power into act, to make one thing begin to be." Monboddo says: "The general idea of cause is that without which another thing called the effect cannot be."

The above definitions might be multiplied almost ad infinitum. But these are enough, and they are in harmony. Others would also be in harmony. It is seen that a cause implies an effect, even as an effect implies a cause. An uneffecting cause is no cause at all. Nothing can be regarded as a cause except as an effect appeals to it as its author. An effect has no claim to being called a cause, whatever its quality or capacity, until it can show something of self-origination.

But referring again to Aristotle, and continuing the definition of cause in the sense that he made divisions of it, there is ground for stating that philosophers have made no progress at all, for they to this day are prone to accept the divisions Aristotle made as axiomatic, and they stand therefore, so far as divisions are concerned in his philosophic shoes. But what are the divisions made by Aristotle? They are these: The material, efficient, formal, and final causes. If it be allowed to make an illustration of this division of causes in a physical sense, reference is made to the pyramid Cheops. The stone is the material cause of the The laborers are the efficient cause. pyramid. architect who had a plan in his mind is the formal cause. Cheops himself, who had a design or purpose, is the final cause.

To speak it plainly, Cheops himself was the cause of

the pyramid which bears his name to this day. It is not necessary to place the adjective final before his name, for he was intelligent, a king, and had authority and power to build the pyramid. It was his conception. Whether he called in the wisdom of counsellors or not is immaterial. Whether he did all the work himself or not, it matters not. It was Cheops as a cause and force from base to finish. The detailed work may be called causes if any one so wishes, but nevertheless all secondary and commanded. ever the name and authority of Cheops does not appear, nothing is done. He is the spirit that moves and dwells in every stone and shovel of mortar. He had formed the purpose to build himself a tomb. purpose needed only to be executed. If it had been a small matter, his own spirit and mind could have brought his own material hands into operation and he could have done the work himself. But it was a great task, and he commanded the men of his country. But it is all the same so far as the cause appears. stone lay in the quarries waiting. Skillful architects and artisans stood round waiting for the word of command. Herds of laborers were ready to go and perform their tasks. Even as the body of Cheops was subject to his own will, so were all of these. He moved them by his will even as he moved his own body.

Now in the work of building this pyramid let it be made appear what relation the four causes of Aristotle sustain, or whether or not they may not all be resolved into one cause, a cause, simply Cheops without any defining adjective. Touching the specific work of building the pyramid, Cheops may be called the intelligent first cause; for while there was a first cause as

a beginning for all things, and that first cause continually exists and runs through all; so in a secondary sense there is a first cause for each particular thing, and it runs through that particular thing unto its finish. The difference is, a first cause *primary* never ceases, whereas a first cause *secondary* ends with a particular effect, as in the building of the pyramid.

If there had been no stone in the quarries, if there had been no skilled architects and artisans, if there had been no people as laborers subject to the authority of Cheops, the whole matter of building the pyramid is absurd. For in matters that cannot be there cannot be a conception of cause any more than a conception of effect. Cause and effect are an interwoven web. But some one might say that if there was no stone Cheops might have built his tomb of brick. That is true, but at the same time nothing is effected concerning cause. All that appears is a change of material that makes the pyramid possible. As to that matter, it might have been built of wood.

Having assumed that Cheops held the place of first cause in the specific work of building the pyramid that bears his name, it is equally well to assume that he was an intelligent and powerful cause concerning this particular thing. This is what Aristotle called final cause. If there is any other cause in the construction of the pyramid, it is hard of perception; for Cheops himself could not have held the place of cause unless all else had been possible. An intelligent cause surveys the field of possibility. There can be no purpose out of the range of possibility except with a madman. When a first, which is also a final, cause has a conception and purpose of an effect, nothing stands in its

way, nothing can be regarded as other cause in the matter, for every other thing is brought into subordination and is made to contribute toward producing the effect.

Now, so far an illustration has been used and cause has been treated in its material embodiment— Cheops the cause and the pyramid the effect. This king stood tangibly before architects and laborers. tangible sense he was the cause, the one power and authority. The real cause, however, lies hidden in the territory of metaphysics. The living, material body of Cheops could only reflect, manifest, and declare its existence. It lies out in that unseen and unexplored metaphysical territory, and occupies the same place from which Cheops obtained his personal power to walk, raise an arm, or move any member of his body. The real cause of the pyramid was the invisible spirit, mind, and will within Cheops. The purpose, power, and authority of these were reflected in his body. These as a real cause laid hands on the stone in the mountains, hauled them and put them in place in the valley of the Nile. There is recognition of things existing between, some seen and others unseen, yet whether apprehended or unapprehended the production of a cause appeared and stands unto this day on the plains of Egypt.

Cause is a recognition unseen, a power felt, a substance acknowledged, a spirit that lives, a mind that conceives, an intelligence that understands, and a will that commands and forces—all hidden from the human eye, but not from the understanding. Phenomena are the book of reference that leads the thought into the field of causes. But when the phenomena are dis-

missed the field looks mysterious and bare, yet in all this apparent nakedness the thought cannot help but explore, for the mind recognizes that something is there. This has been the way of exploring and chasing from ancient days till now. All things appear to remain perpetually the same so far as related to discovery. Why is such the condition? It is man hunting for himself and unable to find out how he has life, mind, and will, how he can be a cause, and yet recognizing that he himself is only an effect.

Man is the most lost, the most perplexing problem, the greatest mystery to himself of all things in the universe. His kind everywhere are crying out with Burns: "O wad some pow'r the giftie gie us, to see oursels." But the power has never come, or at least if it has come it is not universally acknowledged. In both unrest and ambition, trusting to his own powers, ever refusing to acknowledge perpetual inability, he remains in constant effort to attain the end, find himself, what he is and who he is. Sometimes he almost grows ecstatically rapturous over discovery, when the wisdom of another generation, though it may be equally unable to advance, yet nevertheless is able to disprove the so-called discovery and fraud practiced upon science.

II. The causal nexus. It has been assumed in anciher chapter that the spirit or mind of man could have no connection with matter as a thing of observation, or perceive it, or in any way influence and control it, except as an exquisite frame or body was constructed giving adaptation to the mind, and to be used as a medium of connection. Now this appears so probable that it may be conceived that the connection is made in

this way: The human material body is so wonderfully, mysteriously, and artistically arranged that it is the only way that the invisible mind of man is enabled to be connected with matter, to perceive and use it. If this—which seems so probable—be true, it is easily apprehended how there is an existing influence or power between cause and effect, or an unseen influence or motion of cause working into and upon the effect. Yet it would be hard to conceive that this intervening substance, influence, or power could be anything other than the mind itself. But if it be true that man's spirit and mind do not need to be clothed in a frame, such as the human body, in order to perceive matter and have influence over it, nevertheless the connection between mind and matter positively exists, whatever may be the difficulties of tracing the connection. If this be not true, then the whole idea of cause must be abandoned, which is a most preposterous and shuddering thought.

Among those who have attempted to discourse on metaphysics, David Hume was the first to call attention to the connected relation between cause and effect. He denied that such a relation exists, and therefore denied the existence of cause, for the reason that, in his opinion, there was nothing that could be proven to be the effect or production of some other existing thing. This was a very broad sweep of skepticism, and could have conception only in the mind of an absolute materialist. In his denial he attempted to throw the burden of proof on all believers in cause and effect; and not only this, but have them prove what the world has never attempted because impossible. The intelligent world, as a rule, do not regard it absolutely nec-

essary to trace the relation that exists between a cause and its effect in order to be convinced that effects are produced by causes. All that lies antecedent to phenomena is cause, is spirit, mind, and something of influence from them. It is all hidden in metaphysics, and is often rendered more obscure by metaphysical divisions and questions.

Referring particularly to Mr. Hume, it may be stated that it is one thing to deny the ability of man to see and know, to perceive and trace, but quite another to deny the substance and principle which he would see and know, and which seems necessarily to have an existence. Now, by way of illustration, let it be allowed that there exists such a thing as a material cause. For instance, a cannon ball dropping of itself from different heights upon the same object, it will show different degrees of effect on that object. All this is plain enough, and the relation between cause and effect is easily traceable.

But when there is introduced the case of a man using his will, as bending his knee, raising an arm, or pointing the finger, the related connection of cause and motion appears very mysterious and incomprehensible. Here the hand and finger are put in motion which they did not originate. If not, then the motion must have been caused by something from within. And if caused, then caused by what? A man looking on his finger or arm can trace no connection between them and the cause. He is conscious of a thought to raise his arm, and he has consciousness and memory that the arm was lifted. He knows that he had a will to lift his arm. Yet he has no consciousness of that substance or power by which the arm was raised.

Now which seems most to become a man of reason, to deny the existence of cause on the ground of the difficulty in tracing the causal nexus, or to allow that there really exists cause, notwithstanding the imperceptibleness of the relation between it and the produced effect? Continuing the comparison, it may be stated that no one will deny the observed relation between the cannon ball and the different results produced. If any one who did not witness the experiment should be shown the object on which the ball fell, he could easily distinguish between the greater and the less collision. So the arm may be moved by greater or less force, and when made to strike any material thing will show different results.

But the question resolves itself into one of perception and nonperception, which proves nothing. phenomena of effect are perceived because they are the phenomena of matter in some form. Both the connected relation which the effect bears to the mind and will, and the very mind and will themselves, are unperceived because they belong to the unseen, metaphysical world. A philosopher generally floats on the highest tide of reason. When he witnesses phenomena in materiality, and he can give no fair account for it on the basis of matter, and shows his content by referring it to some imaginary law or condition of matter as an apology, he either willfully or ignorantly forfeits his higher claim, and drops himself into the category of the most opaque materialistic skepticism. Mr. Hume did this thing—not on the ground that, as an honest inquirer after truth, he called attention to the relation between cause and effect, but on the ground that he

attempted a destruction of cause without being able to offer a sine qua non.

III. The nature of cause. There is contained in the nature of cause the idea of an ancestral relation. Nothing can be held as a cause until it is known to produce something. Hence its relation of fatherhood and motherhood in regard to the things it produces. Therefore the thing descended from a cause may itself be a cause of another thing. Thus a web of relationship may be woven in the transmutation of things ad infinitum, even until the mind has before it an unsolvable problem to trace the connection and establish the true genealogical table. If it may be allowed to so express it, the blood of an ancestral cause runs through many generations of subsequents. There may intrude tints of coloring and a hundred features of unlikeness, which would in themselves deny some remote ancestral cause; yet the blood is still in all the subsequents.

Things appear sometimes very strange to human eyes and embarrass the understanding, even in the propagation of species. Take, for instance, the mixing of Anglo-Saxon and Indian blood as a cause. The children show the mixed blood so perceptibly that there is no doubt about the cause. These after children mix only with the Saxon race. And thus generations pass until the trace of Indian blood seems lost, and the knowledge of an ancestral mixing is forgotten. But by and by there appears one who looks like an Indian. This is sometimes called *lusus naturæ*. But in truth it is not. It is simply an unusual outcropping of ancestral blood, and stands as a proof that the principle of a cause runs through the whole line of productions in which some ancient or ancestral cause holds a relation.

This is proof that a cause that has produced one thing is not to be regarded as simply related to the effect immediately nearest to it, but that it permeates and influences through all the generation of effects that follow. But this is looking at cause in the nature of self-acting agencies. It may be well to look at cause apart from any self-acting agency, if it be possible that such agencies as causes have existence.

Thousands of people, as sight-seers, visit the valley of the Nile annually. They go to see something. Say it is the pyramid Cheops. They go under the influence of cause. They have minds of their own. The pyramid stands the attraction of the ages. King Cheops, who built it, stands far in the distant past almost forgotten. But the people go to see this chief thing in the wonderland of the Nile. Now the cause of their going must exist in their own minds, in the pyramid, in the distant King Cheops, or else in a divided cause. Then let the mind go in search of that cause. The pyramid stands. It is the remaining production or effect of the mind, will, and power of the ancient king. Did it not stand, the thousands would not flock to the Nile. The fact of its existence awakes thought of traveling. Its very existence in common idea, causes people to travel, go to it, look upon it and be satisfied. But at this point we come to the definition of cause. Webster says: "Cause is that which produces or effects a result; that from which anything proceeds, and without which it would not exist." But here is a great chain of results, seemingly an endless line of effects, and a thousand things brought forward as an influence with causes apparent or real near to each. Yet in the midst of all one truth remains uncovered—and that is,

if Cheops had not been a cause none of these would have followed, none of them would have been. He is therefore the ancient ancestral cause of them all. In the nature of cause he is the first in all that appertain to the pyramid, whether is taken into account its building or the influences that congregate people around it for the purpose of looking upon it. Many other things may be regarded as causes, and whoever grants that they are, they must nevertheless be classed of a secondary nature in their relation to Cheops.

It is the nature of cause to be perpetual. Really it appears to be an undying principle. It is associated with every effect or thing of its production. The essence of it permeates through the whole range of propagation, from first to last. In its nature it seems scarcely subject to more than two classifications: a great First Cause, and first causes secondary. A great First Cause, Author of all, over all, through all, and in all; a first cause, secondary, that permeates and runs through any particular line of effects and most certainly dwells in them.

IV. Cause traced in its relation to the growth of things. When the mind of man goes out into the midst of this so common but most mysterious of things, it perceives at once that, if it is enabled to make any new discovery, the accidental is as likely to figure in it as any course of pure reasoning. But since the accidental is most likely to appear when the mind labors, the task is cheerfully but diffidently undertaken to trace the source of cause in growth and the manner in which this strangest of mechanism is operated in producing the million of forms that dwell in the earth.

Perhaps there is nothing material that does not grow

in the sense of increasing its magnitude until it either can find no substance or else has lost its power to apply the hand that makes the increase. But in any sense, it is considered there is a limit. The earth itself grows in the sense of increasing its magnitude, and will continue to increase by the force of gravity as long as the uncondensed matter of space comes within the range of its influence. But this kind of increase is not difficult in the understanding, for in it there is no perceptible life or self-action, but only the globular arrangement of dead matter under a universal force called gravity.

But the object in view is to consider growth among the living things; and what is meant by living things is to consider things of the earth in which or about which there is exhibited a nature of self-action. This embraces a large field—in the animal kingdom from man. to the lowest; in the vegetable kingdom from the great redwood trees of California to the humblest moss appearance of the Mammoth Cave; in the mineral kingdom all forms that come and go, as is so natural with the other kingdoms. But in this latter kingdom it should be observed that certain things of growth are age-lasting, because of the difficulty of reaching situations and conditions of destructiveness. Nevertheless, as certainly as there were conditions that produced growth, there are likewise possible conditions that will not only check growth, as many of these already show, but will absolutely destroy the forms themselves.

Before advancing further it seems proper to introduce Mr. Herbert Spencer's definition, or the expressed idea he obtained, of the perpetual existence of living material forms. Referring to these, he says: "Perfect correspondence would be perfect life. Were there no

changes in the environment but such as the organism had adapted changes to meet, and were it never to fail in the efficiency with which it met them, there would be eternal existence and eternal knowledge."

In this philosophical expression of perpetual life by Mr. Spencer he seemed to overlook one thing that sustains a very near relation, and which should have been noticed by him in this connection. Now the power to live and the power to grow are so interwoven that they not only coexist but seem to be correlated in principle. A thing grows, but finally ceases to grow. This it will do without a change in environment, and it does this thing often under the most embarrassing conditions. What does it signify? Not a change in environment, of course, but a change in the efficiency of the organism. Environment may exist perpetually the same, yet the infant finally reaches old age and dies. Between the stages the environment that existed throughout the period of growth continues, and why does not growth continue? It is said the life of the organism continues. But is that true any more than that the growth continues?

Things that grow and live, whatever the environment and whatever the possible efficiency of changed adaptation to meet either a changing or a constant environment, reach a stage in which growth stops so far as magnitude is concerned, and the life or force that gave the growth proportionately abates, or else is only sufficiently exercised to make weaker and yet weaker repairs for that which comes of waste. Indeed, in material organisms, according to Mr. Spencer's idea, there would no more be a perpetual or eternal life than there would be a perpetual growth. Should such be the con-

dition, the earth would soon be filled with living things of mammoth size.

But life and growth go together so far as the material organism is concerned. It may be a growth increasing the size of an organism, in which also any necessary repairs are made, or it may be merely a giving and applying the necessary supplies for waste. It is such a fixed condition of all living organisms that, however honorable it is to go in search of the unattainable and to use the reason to all possible endurance, yet after all many of its forged theories taste a speck of the imagination.

But coming more particularly to growth, its cause, and how applied, it is proper to repeat here that in another chapter it is assumed that matter is incidental in the universe, and may as incidentally in the transmutation of things cease to be; not that the principle of it would cease to be, for matter in its principal state may have had energy, or may have possessed the power of a cause along with other forces. Matter is now pronounced dead, and therefore without force and unable to be a cause of anything. But what is meant by the principle of matter is the substance out of which it was evolved and into which it may again be resolved. This does not signify, however, that physical atoms exist in the principle of matter, such as are conceived in physical science, yet that the principle substantially contains all that is substantially contained in matter, but in a different and inconceivable arrangement.

The principle of growth contains in it the suggestion that either the whole of the principle of matter is not yet turned into matter, or else some matter is continually being resolved back into its principle. This brings the mind to stand at the open door of that mystery called growth. And here it is assumed that growth has but little if anything to do with matter, but with the principle of it; that growth dwells in the realm of matter's principle, and not in matter itself. They may be both together, yet only one is seen; but when the function of growth is performed an object of matter is seen, a new organism.

The case may be stated this way: When there was no materiality there came materiality; when there was no physical universe there came a physical universe. Alluding to the physical universe, it is said on high authority that God made it. If it should be affirmed that God not only made, constructed the universe, but also that he made the material out of which the universe was built and arranged, it makes little difference, for all this can easily be allowed. This leaves no ground on that line of thinking, and shifts the argument—if further argument be necessary—to the ground of God's manner of building the universe out of the material of his own creation. For because matter exists in its present form, it gives no proof that the present form is the first and only step toward its existence.

Assuming then that the principle of matter as an antedating creation existed before matter itself, and still further assuming that the principle of matter has not altogether gone into matter, or that as it is necessary matter is resolved back to its principle, it may be perceived how that a feature of creation or the building of organisms through growth still exists. This process of building, growing, increasing the magnitude and giving the different forms from the cradle of things to the most stalwart, is a process that draws

upon the principle of matter and not upon matter itself. Matter is too coarse in its composition, in any sense that it can be put under view, to enter into the refined process of growth. It needs to be put through the crucible that distills it and in an unseen way resolves it into its principle, and then it stands ready to enter into the growing process.

There is a power, a force that applies the substance of growth. Whatever it is, it may be called the cause of growth. It is one thing, not many, in each organism. In every distinct living organism there must dwell a self-acting agency. This agency must be the cause of its growth. Everything after its kind, and everything has its own hand and trowel. They can be used by it and by no one else. This self-acting agency builds its own house. It entered on this process at the beginning of its individuality. It is not conscious of the work it does and raises no question, but the work of growing is constant. It reaches no uncertain hand out into that refined substance, the principle of matter, but takes hold of the right thing and applies it, and there is growth. The unseen life or force takes hold of the unseen and builds the visible body. "All flesh is not the same flesh." All things composed of matter are not the same kind of matter. Each individuality in self-possession and in cunning wisdom understands its business, and, reaching out into the principle of matter, constructs its own organism of matter; so that "things which are seen are not made of things which appear." Growing is the process of reaching out into the unseen, gathering and building into the visible.

Not even an intelligent being is conscious of his growing. He is conscious only of the fact that he does

grow. The growing process is too refined and too metaphysical for the discernment or consciousness that works through a material body. It is the work of an immaterial life or force. A man would have to see the material applied in order to have consciousness and knowledge of the process of growing. But this would be a work of matter and not the work that deals with the invisible principle that, like unto a new creation, is turning out the millions of material forms constantly appearing.

Recognizing that it is impossible to dismiss cause from the beginning of things, and recognizing furthermore that the beginning cause, however intricate and however obscure the web of connection may appear, has a connection nevertheless with all that has followed, and has an influence positive and immediate or else delegated to the individualities that construct their own material forms, there is seen a mechanism continually going on high above instinct and human reason. It is the process of growth. It makes no mistakes. It is a process of perfection. In it is a life action that knows how to apply its own peculiar hands, on what to seize and how to construct, and with a precision a thousandfold beyond the honeybee.

The cause to be recognized is the self-acting life or agency that builds for itself a material body. It would seem to partake of the nature of materialism should it not be declared this cause is of a limited and secondary class. It cannot, so to speak, build a city. It can build only its own house. It is an individuality. Anything that can possibly spring from it endowed with a growing process is but another individuality possessed of the

same power of cause. But it is said this cause is secondary. It is so declared because it has a relation to that *Source* which produced the first of this or any kind of things.

When growth is held in the contemplation, when man sufficiently possesses his soul to take time to look upon this strange and peculiar process of creation that is constantly going on in all the earth, when he beholds how things are made and unmade, when his thought dips down into that mysterious and invisible territory where the work of growth, or a creation of new organisms, is constantly carried on, and there recognizes that an unseen hand lays hold upon the invisible principle of matter, and with his own power of transmutation constructs the material form of a crystal, a tree, an ox, or a man, he feels such a recoil and retroaction in his soul that he would uncover his head in recognition of universal beauty, power, and mystery, and cry out: "Surely the spot on which I stand is holy ground."

V. Cause traced in its relation to the eruption of Mount Pelee and the Galveston storm. Here the thought approaches fire, wind, electricity, and much besides that is mysterious. It is not enough to say that running lava and falling cinder in the one instance destroyed a great city, and that wind and wave destroyed another. These are but the presented phenomena which cause brings into the account. They hold themselves out before the eyes, and the understanding is satisfied with these material phenomena and all that they produced. But behind wind and running lava there is a profounder ancestral cause that reaches back in unseen and mysterious territory where the mind of man

moves slowly and feels at every step of penetration a constant need of assistance.

It should never be forgotten in the pursuit of causes that an ancestral cause secondary or, as it may be expressed, a first cause in the lines of effects of any particular thing remains constant, though often obscure, in all the productions of that particular beginning. However much other things may be commingled with it and its line of effects and tend to obscure the sense of it, nevertheless it would be hard to prove, in any instance, that the influence of it is altogether wasted. Granting this principle to be true in the nature of causes secondary, may it not then be declared, with the same reasonable conclusion, that it should not be forgotten in the pursuit of causes that the first cause primary, the originator, the creator of the first thing, is a constant force of influence in all the subsequents of that particular thing? And if in one thing, therefore in every particular thing of his origination. So then when the first causes secondary are held in contrast with the first cause primary, it may be discerned that, while the secondary causes are constant through their particular line of effects, it is but the exercise of a delegated power in universal arrangement; nor does it disprove the presence of the great first cause. For if a first cause secondary is both present and constant in its particular line of effects, the first cause primary must be both present and constant in the line of effects of every particularly appearing thing of his origination. Thus it may be discerned how causes may be contained within a cause, a secondary in the primary.

But it may be stated, except for a delegated free will among intelligent beings, there is little reason to doubt that the utmost harmony would exist between the first cause primary and all secondary causes. Hence a delegated free will among secondary causes, asserting its power and attempting to dismiss the influence and agency of a first cause primary, is constantly leading to thousands of interruptions, and holds even the intelligent world away from the Elysian fields of harmony. Because of this the storms of human wrath sweep away cities and make blood run as lava from the mountains.

It would not be good for man to live in a world where everything is in harmony except himself. In view of his moral status, it is best that the earth be as it is. He needs to see disaster and ruin spring from another source than himself. They are educational. He is more pliable to their touch and influence. In them are no hate and madness that make against man's culture. But in the storms and earthquakes of his own making there runs too deep a vein of malice and enmity to allow of his moral improvement, or even to think of that harmony that comes of subjecting his own will to that of the great cause primary.

But it has been assumed that a cause proper is a self-acting agency, a thing in comparison with all other that has some kind of life. The things of the universe are things of life or nonlife. There can be no other conception. Things without life are helpless. A thing conceived of life and helpless is nonlife. It is subject to the action of living things without showing signs of resistance. All motion comes of life, and not life of motion. A living agent produces; the nonliving or helpless can produce nothing. But it is a hard search to find the dividing line between the living and the non-

living. It crosses from the animal into the vegetable kingdom. Nor does it stop here. It crosses again into the mineral. Forces are at work there, and it is hard to disconnect these forces altogether from some kind of living agency. It may not be a living agency that has in every instance reason and consciousness; nevertheless it does the work. It presents the physical change and phenomena in proof of its existence. It cannot show its hand or face, but it can show a truth—the truth of its existence. It gives testimony through its work. Reason teaches that a dead thing could not have done the work. To affirm such a thing is to declare the dead thing to be an active agent and therefore living, which is contrary to all reason and truth.

What faculties any particular life possesses beyond the phenomena it presents cannot be known. Man cannot intelligently walk the fields behind the phenomena. He can only declare that an agency exists that wrought the work. He is able to attribute to it life, power, and faculties equal to the work presented. But to hold in question what it could otherwise do is speculation. To hold in question whether it had exhausted its power, weakened it or increased it, is profitless. To hold in question whether it is a life age-abiding or will some day perish in the evolution of things is fruitless. He can read the life only through the letters of its phenomena.

With all that has been said, the task remains of tracing the Galveston storm and the eruption of Mount Pelee to their true cause. They must, if it be possible to do so, be traced to some self-acting agency. But in doing this work there is confusion yet to be looked after. It is best in the first instance to set the eyes and

thought on two cities lying in ruins—Galveston by the storm and flood and St. Pierre by running lava, cinder, and stifling, poisonous air, and in the midst of all this wreck the ghastly remains of many thousands of human beings. The question first suggested is of a moral nature. Would the mountain have burned and the wind have blown as they did had these cities not existed? The probabilities, grounded in the fact that history of this kind has been repeating itself from time immemorial and before these cities were built, are that the eruption and wind would have been just as they were. So then the moral question which may be involved must be shifted to other grounds. The question is not one of moralizing on effects, but one of search for the cause of the burning mountain and storm. The search must be made on the basis of an a posteriori argument.

The wrecks are seen as results of storm and mountain eruption. But there must be a cause for the storm and the volcanic action. This is the point at which the scientific world becomes very voluble. They introduce nature and nature's laws. But these, after all that can be said, imply but little more than the condition of things; a condition that produces events or phenomena. But is there not something involved in these things more than mere matter? How can it be perceived that mere helpless matter is capable of such accomplishments? The mere matter itself must be in the hands of something that gives it all its motions. This in the first instance is called force. One way of illustration is in viewing the lava running down the mountain. It is a liquid and is in a race to get to the plain. It would seek its level and be at rest. It is in the hand of that force called gravity. If pent by some other force, it would

finally break the barriers and would suddenly produce disaster equal to the Johnstown flood.

But it is allowed that force may be introduced as a cause for storm and volcanic action. What force, and whence came it? Whence the force that put the lava upon the top of the mountain, that took it out of the hand of gravity and then returned it again to the same hand that conducted it to the valley below? But the moving lava is a force and the wind is a force. So is a man's fist a force, but there is a power behind the fist that uses it as a club in a similar sense that it would use any other material club grasped in the hand.

But then to account for the Galveston storm. The earth's surface under the sun's rays obtains different temperatures, causing heated air to rise, and other air, like lava in the hand of gravity running down the mountain, rushes to fill the void. That is all beautiful; is not all theory, but contains a modicum of truth. But still there is something seriously unaccounted for if placed to rest solely on this principle. Why did not the air rush equally and uniformly from all directions and supply the void with better steadiness? Why did it not supply the demand without so much hesitation until a disastrous storm was made necessary to bring the usual equilibrium and consequent calm? If the earth became hot under the sun's rays in a certain region, why did the storm go northward and not southward? If air was needed to cool the heated region as well as to supply the void, why was a demand made for the warmer air of the equator instead of the colder air of the north? Why was that right angle made in the track of the storm off the coast of Florida, bending it westward to

Galveston; and another right angle made, bending it northward to Chicago and the lake region? Why was it a storm of such length, such narrowness, and so tortuous? Why did it not blow direct to the heated region? If there was such a long line of heated region, why did it wait for one line of storm?

There is nothing seen in ruined cities, running lava, volcanic action, and rushing, even cyclonic, winds, except the phenomena of a cause. A man may blow away his breath and wear his quill to the stilt about storm winds and volcanoes; but his words, if not idle, amount to little else than discourses on phenomena. Things are too often called causes which are no more than a connected chain of dependent results. True causes belong to things of self-action. Whatever can be found of self-action in storm and volcanic action is the cause of these things. If nothing can be found of self-action connected with them, they are to be looked upon as phenomena with their causes unknown.

But it has been assumed that the first cause primary is associated with every particular thing of his creation through the whole line of its effects; and likewise that each first cause secondary is associated with the whole line of its effects. These are really the only kinds of causes, and the less is contained in the greater. Where there is no appreciative secondary cause in anything, the great first cause is there to be regarded alone, and all that appears is to be regarded as but the phenomena presented in the connected chain of his operation. Hence storm winds and volcanic action, being concerned with things incapable of self-action and not conceivably placed in the hands of any secondary cause,

are left under the logic of reason in the hands of the great first cause.

But since heat is so seriously associated with volcanic action, it deserves a proper notice. It is not known whether heat is a naturally existing principle or an influence or something generated by motion. In an existing principle its nature is to rest in concealment. In this state, or in its condition of what is called latent heat, it is hard of discovery for lack of phenomena. Yet different substances hold different degrees of heat, measured by its specific gravity. If the nature of heat is concealment and rest, a cause must be admitted to provoke it into all its active association in volcanic action. If it is generated through motion, a cause must be admitted to produce motion. In either case, since the human reason and thought are incapable of introducing anything intermediary unless it presents the character of being an effect itself, the true cause is traced to the source which has the management of the whole bowels of the earth. It is the first cause that gave the mountain all beneath it—the earth itself. It is the cause that permeates, dwells in, and pursues to the end every particular thing of its origination, and the task in hand is not to be regarded greater than the task of origination. The volcanic action can have no cause except in one capable of self-action. If none such can be found this side of Him that originated the mountain and its bowels beneath, the human mind can find no rest except by placing the cause of Mount Pelee's eruption in the hand of that self-acting, all-powerful Being who is called God.

Since it was stated that any moral question that may have a relation to the eruption of Mount Pelee and the

Galveston storm was shifted to other ground, it may be a fitting close to this chapter to speak a few words concerning it. It is very evident to all who watched results on humanity that the storm and eruption were educational to the whole world. The news was flashed over the wires of every continent, and the multitudes awaited anxiously for the full knowledge of these disasters. Sympathy and compassion that had, as noble virtues, become slack and dormant awoke anew, that hearts might feel and eyes might see the needs of human want. Indicating that not only the earth, but that also a higher source is interested in the moral culture of man, that the virtuous principles, which are the noblest of all, should be kept alive and active. Hearts that had grown hard, cold, and indifferent were touched as never before. Voluntary contributions of expressed sympathy and of material aid came not only from Washington, London, and Berlin, but from evervwhere, for all races of humanity were touched by the desolation wrought in the earth. It was educational to the moral side of humanity. It taught humanity the imminent danger of all, and that, standing in the midst of danger, all should feel the pulse of a universal brotherhood.

But in order to produce this effect on humanity, that there should be such visitation on the innocent or upon those no more guilty than others is a hard question. It may be that the whole people of the earth deserved such a fate, and that these, and other disasters like them, came as a warning, that only a few out of many guilty meet with a sad fate unwarned, or if admonished it is unheeded. But again, unless human life had been involved, nothing of the nature of a moral question could

be associated with it. Nothing of a moral nature was ever or could be associated with the storms that swept Galveston coast before it was inhabited, nor upon the island site of St. Pierre before human inhabitants were there. There must be distress in human life before moral questions can be attached to the desolation wrought by storm, flood, and volcanic action. In whatever light moral questions are associated with the desolation wrought by nature, they are smothered in the same mysteriousness that caused the disaster. They all alike may be attributed to the same cause. But what conditions in either or in both induced a self-acting agency, a cause when it was in its power not to act, are hard to discern.

CHAPTER V.

CAUSE.

Cause Primary.

THE first cause as an idea in the human mind, as the result of thinking, as revealed through the phenomena of nature, or as directly revealed by the cause himself, is both the most interesting and most awe-producing subject man has ever held in contemplation. At the very threshold of such acquaintance and presence man feels a tremulousness inspired by reverent fear. Both with the man of faith and the skeptic, whether the first cause be regarded as the God whose moral character is revealed in the Bible or regarded as simply some kind of force, they are alike seized with similar feelings of respect and reverence. It is unavoidable. The mind cannot abate it, for it is standing in the presence of that mighty something which, if it had never acted, the physical universe and all that is unknowable could never have been. Hence it is with conscious reverence that any man would dare to introduce even his mind-presence into the most sacred and holy place in the universe.

But the task is set to look after the first cause, a task that would for a moment disregard the Bible and all other books and teachings except as ideas of their revelation may come up in the course of reasoning. There are but two modes of making an argument for the first cause: the *a priori* and the *a posteriori*. In these arguments there are two termini: the end or present stage

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to which existent things have advanced, and the unoriginated condition of the universe. The a priori argument would begin at the latter of these termini, and the a posteriori argument would begin with the first. They both travel the same highway, but in opposite directions. Each is equally limited in its sphere of legitimate thought, each is held within the compass of the two termini, the stage that existences have now reached and the unoriginated condition of the universe. The mind may dwell upon what it conceives was first originated as it sees it or perceives it through phenomena, but to go into the anterior field of the unmade universe it is as incapable of a proper survey of the conditions as it is to measure eternity itself. The edge of that territory is where all arguments meet and where all must stop. All that ever come out of it must come by the will and consent of what lived, dwelled, and acted then, or else a mere suspected condition as revealed through the phenomena of matter.

I. The a priori argument. There must have been an uncreated condition before there was a created condition, an eternity before there was time in eternity. Not to allow this places the mind in a wilderness out of which it cannot find itself. Not to allow this puts the thought to the necessity of establishing an eternal regressive infinity, the end of which is beyond all conception and contrary to all reason. Things that exist cannot be regarded otherwise than pendent. A support must exist somewhere for each particular thing, and likewise there must be a support for the whole. This kind of conception, in the contemplation of existences, is the only source in which the mind can find rest. But if the universe is constructed in the idea of an endless

regression, all things are pendent and all things equally support, which amounts to saying that there is neither support nor pendency in all the world. This would leave the universe a thing of random arrangement. But the wonder would rise why the existing and unaccountable order and precision.

Unrelated to any kind of phenomena, the human mind would be likely to conceive all manner of contradictory conditions of the unoriginated universe, if indeed it would be capable of conception at all. It could hardly help but consider itself a part of that condition. Its assurance that it is no part of that condition originates in the ground that to set up such a claim for itself would place both it and all things of connected association in the field of the unoriginated. This would be a severe jolt to the understanding, since it would lead to the idea that the unoriginated condition was not distinctly different from that which is now. Such an idea would be one of the greatest confusion. It would deny the certainty of a beginning point for things which now appear, establish the infinity of regression, and introduce tenfold more and harder questions than to allow that in eternity there was an unoriginated condition out of which there is a date, though uncomputed, when present existences began to appear.

The fact of the unoriginated condition is one thing, and the character of it is quite another thing. For the present, only the fact that there was such a condition is under consideration. It is true that the mind is unable to hold such a condition in its compass, reason about it, count time about it, or offer any reasons why such did exist. Yet the mind is equally unable to per-

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ceive the consistency of things and find rest without such an acknowledgment.

Therefore to satisfy the human mind it must be confessed that there exists in the universe a something that was not made; the original without which nothing could appear; a cause the first of all; that the self-existing something belongs to eternity, and that the something, and the only thing, existed in the unoriginated condition of the universe. But some one might say, Why was there a certain something? With just as much reason it may be asked, Why should there have been anything else than it? But some would say, Why were there not many original things? With equal propriety it might be asked, Limited to what number of things? Then why not just one? But it may be asked, Why a something of a certain quality or nature? It may be as pertinently asked, Why not thus as otherwise? It may be asked, Why an unoriginated something? Then it may be far more interestingly asked, How can all existences that now appear be accounted for except by its acknowledgment? Questions are more curious than wise. Yet they are always legitimate among honest inquirers after knowledge. The only point of interest is that there was an uncreated condition that belongs to eternity, and that there is a created condition that belongs to time; that in the uncreated condition there dwelt, lived, and acted a something that is the first cause, and hence the cause of the created universe.

Now let it be hypothecated that matter was the uncreated condition, and that it of itself generated the present condition of the universe and is therefore to be named the first cause. This on the first glance is as-

suming a very broad ground for matter, for it is known to be the only positively dead thing among all that exists. The more it is looked upon and experimented with, the deeper rises the impression that it is perfectly powerless, that it is altogether incapable of self-action, that it cannot and did not create the myriad forms that it has been made to assume. Its apparent self-action is dissipated by the facts attesting everywhere that the life, forces, mind, will, and consciousness that appear within it are other things than matter. So it would seem, even at this stage of the argument, that whoever would attribute the first cause to matter is put to the necessity of proving that matter possessed a power in the uncreated condition that has now become exhausted. This would be a very serious and doubtful task, so much so that hardly any one will ever dare to attempt it. On the basis of such hypothesis the first cause was mutable, has perished. It was not even equal to the things of its production, all of which is absurd.

It was observed in another chapter, in which matter was the positive subject of investigation, that it is a small quantity in the universe. There is scarcely one cubic inch of condensed matter for each ten million cubic miles of space. Now if one cubic inch of matter should be equally diffused throughout a cubic yard, the specific gravity of a cubic inch of it would be more than thirty-six thousand times less than it is; a specific gravity so inappreciable as to make it appear probable that science would be unable to discover the matter in the cubic yard. When it is considered that in a cubic mile the specific gravity would be a billion times less, and in the ten millions of cubic miles it would still be ten millions of times less, it is easily seen how scarce

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matter is in the universe, and that, instead of being the thing of greatest quantity, it may be among the least. For it is very probable that there are things diffused through space, hidden no more than matter would be in general diffusion, and in great quantity; and that if brought into subjection, as has been the case with dead matter, and concentrated, there would be something to behold that would make matter look insignificant in the comparison.

That which has been stated is for the purpose of calling attention to the truth that matter has been magnified and gained an importance in human thought because man is in part material, and can see matter only in the sense of an obstruction to his vision, and probably only a small part of that. But whichever way the subject is looked into, if it be granted that matter was the selfexisting thing in the uncreated condition and the only thing, how does it appear that there are greater things than matter in the universe? How has it happened that matter, when called the first cause, has been subdued? For then the old parent of all is dead, and is in utter subjection to the power and forces that hold it in subjection. Such contradictions are possible only when a mistake has been made. The mistake is grounded in the error of making matter the one existing thing in the uncreated condition, or the first cause of all.

Matter is mutable, which is a quality that does not or should not belong to a thing unoriginated. That which is from eternity cannot change itself, and it is a contradiction to suppose that anything can spring from it that can have power to change it or destroy it. Things constructed, however overawing and powerful they may appear in human sense, are not as great as the cause that constructs. The cause still holds the things of fabrication in hand and can destroy them at will, but they cannot destroy the cause. But matter is mutable, and, being mutable, either changes itself, which is contrary to the character of a first cause, or else it is changed by the action of other forces, which would be destructive of the idea that it is the first cause.

If matter is to be regarded as the unoriginated first cause, and is to be regarded as always having been such in character as now belongs to it, there are complications about it that lead to difficulties, contradictions, and even to the destruction of the idea that it can have. any claim for being the first cause. It is known that forces, not of matter, enter into it, make use of it, and mold the different forms, whether they be looked upon as globes of planetary size or as drops of falling rain; whether they be the form of a crystal, a shell, a vegetable growth, a reptile, or a man. These forces that build the forms are mightier and of better character than the material used in building the forms. They are the mighty and the active, and they lay hold of the helpless. They are not all equally powerful, and therefore may often interfere with each other's labor and work. But in all this matter, which is the helpless quantity, and with which they all deal, is not at all accountable. It would appear that these or some of these are entitled to be named as the first cause rather than matter. It is not known that they are mutable. So far as knowledge goes, they are constant. Because one is more powerful than another and interferes with the processes going on in matter gives no proof either of a force's absence or its mutability.

If matter is to be called the first cause, it must be

proved to have a capability that has never been discovered in its possession. As stated above, no one has ever yet been able to prove that it has power within itself to generate the different forms in which it is found. Taking a thing for granted is very different from making proof of it. Taking a thing for granted is the cheapest of all arguments. It is a very abusive method in searching out the truth. But furthermore, How has matter produced all those forces and even life itself and placed them on the outside to come in and go out and do with their Creator just according to their nature and inclination? Do they not hold matter bound? But some one may say that they held matter in possession in the uncreated condition of the universe. All very well. Then there must have been several things in that uncreated condition, and among them matter is the most insignificant, and, therefore, as it is in itself helpless, it is the least entitled to the name of the first cause. But all this indicates the contradictions and difficulties that arise when it is assumed that matter was the first cause.

But if matter is held to be the first cause, why does it show itself to be so young? It certainly shows youthfulness in its present state of being, gathered into the spheres of the material universe. It is natural in looking for the first cause to bend the thought not simply toward the thing we see, but, if it has not a satisfactory hoary head, toward something else conceivable that gives a better answer to the understanding. Matter is an open book, and holds out to man its own tables of calculation. As gathered in spheres, taking the earth as a basis for inductive reasoning, matter shows a modern origin, at least a modern origin so far as its present wondrous collected forms are concerned. The

word "modern" is here used in contrast with conception of a more ancient date for action in the first cause than matter can afford.

It matters little whether the years of globular matter are counted by thousands or millions, even to the extremest age the most doubting may require, still there is modernness in the aspect of matter that cannot be overlooked. There is nothing in its forms counted through geological structure of its connected strata but periods of time, one following another. These connected structures of the earth indicate time and count the periods as certainly as the pithy circles of the forest trees show the years of their growth and their age. either case, there is a count to the last and then a stop, only with this difference: one is a year and accurately determined, while the other is a period of years with quantity undetermined. Paleontology makes a similar argument, only it fixes a date from sterile rock through all the genealogical ribs of the earth, through fauna, and up to man. The period since man appeared is known to be only a few thousand years. Instead of striking the human sense as the first cause, each period simply stands with a signboard on its face pointing an index finger toward the cause.

But it might be held that not matter, but the principle or substance of it, was the only thing in the unoriginated universe, and that it is the first cause, and from it all other being has sprung; that it was the initial power that gave origin to the created world and even to matter itself. Indeed, there is on a casual glance a plausibility about this conception that does not belong to matter. There is nothing harsh in the thought that the principle of matter may have existed before matter

itself. This would be holding to the idea that matter is not, in either the form or quality of its origination, but that there was a first principle of it, and that matter incidentally appeared through a mutation or evolution of its formerly existing principle. Now, it is not necessary to deny that a principle of matter existed before matter itself, or that such mutation or evolution has once in time taken place, in order to show that neither matter nor the principle of it was the first cause.

The question is a first cause. If the principle of matter changed in order to produce matter, that is an admission that matter does not belong to the uncreated condition of the universe, and therefore shows itself not to be the first cause. If the principle of it passed through such evolution, it shows itself a creature of change. In this it forfeits both the character and nature of a first cause, shows the mutation and fickleness of things made, rather than the stability of the something unoriginated. Therefore neither matter nor whatever may be regarded as the principle of it is entitled to the name of the first cause.

Since it must be conceded that in eternity there was an unoriginated condition of the universe, and that something existed in that condition that stands as the cause of the created universe, and since it appears that matter or any conceivable principle of it gives a satisfactory answer as a first cause, the search for that cause must be continued. Of course the search cannot be continued among visible things except in their conceivable and reasonable relation to something that is unseen. The question, therefore, now passes over into metaphysical grounds. And in this beginning of search in such territory, time is not lost when it is stated that

science of to-day is not altogether Sadducean. For men of science are in search of acknowledged but unseen existences. The difference between them and another class of scientists, who may be called scientists of faith, is that the latter acknowledge the evidence is already sufficient, whereas the former are not satisfied with the knowledge of the evidence that produces faith in the fact, but would handle the fact itself, thereby dwelling in that knowledge that makes faith exclusive. Really this is the only ground for any skepticism that now exists. That is to say, one class of scientists would positively know everything, whereas another class yield their assent on reasonable and well-founded evidence.

Scio means "I know." I know means knowledge grasped in hand. This is strict science. But even this is based on things unseen, but necessarily acknowledged. So there is a species of scientific "faith" associated and commingled with science. It is a fact that absolute knowledge is quite limited. Credo means "I believe." For greater emphasis, and to carry the assent of the mind into confidence, another word is used. Hence fido means "I have confidence in, I trust." The faith scientist would look carefully after evidence and have it fully in knowledge and ample. But he prudently stops at the fact the evidence supports, with a consciousness that it cannot be touched, handled, and measured. It is in the invisible, and cannot be caught in a material crucible.

In view of such a situation the question rises, Shall the world be run, not by science or faith, but shall it be run by knowledge or faith? The answer is, Neither way in particular, but by both in general. Knowledge of evi-

dence is very different from a knowledge of facts. In both science and religion, things are often treated as facts when really they are not knowledge but granted truth supported by evidence. In both science and religion some such have been proven false. But how shall the world run and how shall it drift? Of course it will drift just as it runs. But it should run consistently. If it is assumed that it is to run on mere knowledge, it will run on a very narrow gauge. There is nothing in mere knowledge that so strikes the sense as to exclude from man self-pride and arrogancy; nothing that particularly teaches and impresses the moral nature. Knowledge as a quality in man is like wealth and is often a conceit, that sets one man above another, and has a tendency to encourage vanity.

But on the other hand, faith supported by evidence is not a confined science, at least not so confined as that of the materialist who claims, though falsely, to believe nothing, but simply to dwell in knowledge. Faith takes in the unseen where exists the first cause. It takes in so much of the unseen as is of the highest probability, not as absolute fact, but as facts supported by evidence, and the evidence of support is knowledge. So then the man of faith, or the Christian scientist, if he may be so called, allows all real discovery of the naturalist or materialist, and casts his anchor in the confidence of the supernatural wherever there is a strong chain of evidence for support. This is not superstition, as has been charged through a lack of knowledge or through prejudice; but it may be a ground out of which superstition and fanaticism grow even as naturalism is such ground itself.

The foregoing chain of thought has naturally inter-

luded as an introduction to the true nature and quality of the first cause. The ground now appears to be sufficiently clear. The first cause is God; that Being, and the only Being, that existed in the unoriginated condition of the universe; that condition to which finitude may reach and where, under the restraint of eternity, it must end. The mind of man is able to reach only to this first cause who existed as the only Being in the unoriginated or uncaused universe. At that Being and that condition the finite mind of man must stop. Intelligent finiteness must find a finitude, a stopping place. In the downstream of creation it stops with that which is in the upstream with the first cause. These are its fitting limitations. Beyond in either direction is a breakdown in the mind itself. Within these limits reason can do her perfect work. Beyond either way is the deep, wide sea of eternity, on which no human craft can float.

Here is a *cause* without a cause, a support upon which all that is depends. But why, thinks one, did such a cause exist? That is a question, if a proper one at all, that belongs to the realm beyond finitude. The secrets of the answer are shut up in the archives of eternity. If they were in the archives of time, the door might be opened. If the first cause had been matter, or any other than God, there would have been the same necessity for this same question. The question is not asked because the first cause is God, but because there is a first cause.

If an argument should be attempted, it would be just as hard to prove that matter as a first cause was unoriginated as to prove that God was unoriginated. But such questions are both unbecoming and unnatural.

They are altogether outside and above man's mind. He can trace only to the first cause, when all nature commands him to stop. He must stay within his prison house of finitude and be content forever in such limitation. He can find enough to occupy his time and thought, without attempting the impossible.

Placing God as the first cause strikes human sense in higher admiration than matter or any other conceivable thing can do. It places more than force, motion, and mere life at the head of creation. It places there mind and will. This acknowledgment is a useful and basic principle, and removes from creation every idea of chance work, together with every feature of *lusus naturæ*. It signifies a use and purpose in all that is made, and that nothing is made and turned loose as a bird that knows not where is the harvest, but that the bird and the harvest shall go together.

Much might be said about the beginning of the work of this great first cause, but again much might be said altogether unprofitable. It brings the thought in such contact with a Being of Eternity that there would be no choice of dates. Any date that man could fix would sustain the same relation to eternity as any other. Ancient and modern times, before and time after, are human ideas of time measure that belong to creatures of time, and are needful to facilitate the human understanding. They belong to the created and not the uncreated, to man and not God.

There is one thing that satisfies curiosity, and even the mind itself. That is to say, since the whole of time, whatever its length, can sustain no relation to eternity as a part, yet the satisfaction comes by giving it great length and making it, in conception, look as nearly like eternity as possible. There is to finite minds such a vagueness about the word "eternity" that it always produces hesitation as if waiting for an explanation which never comes. It is impossible. Hence the desire to have something to consider and the measures in its length as nearly like unto eternity as possible. This introduces the thought to a probability as to what was the beginning of creation by the first cause. Moses, in speaking of the physical worlds, mentioned a "beginning." He says: "In the beginning God created the heaven and the earth."

It cannot be proved that Moses meant otherwise than to mention the epoch of matter in universal creation. If Moses meant that this was the first creative act of God, then matter was the first thing he produced and is the most ancient thing that exists in nature. Hence time began with the revolving physical spheres. If it is assumed that the physical worlds were the first things created, it must be allowed that there was another creation before Adam; for when he was created there were not only angels, but fallen angels, of which Satan is chief.

It is more satisfying to the mind that Moses by the "beginning" meant the beginning of the material epoch and not the first creative act. While in reason one date for the first beginning of creation is as good as another when contrasted with eternity, nevertheless there is something more satisfying to the human mind for finding, if possible, a very ancient date. Man, endowed as he is with intelligence, has by nature a disposition to find out all truth. When he recognizes that a truth is hidden, and something unsatisfying is substituted for it, he cannot but regard it as a milepost on the way, and

passes by it in continued search after the satisfying truth itself. Since, to say nothing of the declaration of Moses, he can so nearly count the age of the physical world, he is not satisfied to consider them as the first creative acts of the eternal first cause. It seems too modern to satisfy. He is naturally disposed to think the truth of the first creative acts lies farther back, as nearly as possible like eternity itself.

The mind is not satisfied with an uncreated condition, and in it a cause able to create and nothing being done; it is not satisfied with recognizing a still universe and unacting cause, a sleeping God. But at this point, unless proper guards are placed around thought, there may arise great confusion. For herein is a tendency to make time and eternity one and the same. The truth should not be overlooked that time is concerned with eternity, but not eternity with time. Time, though not a created substance, is the result of created substance. With the first it had a birth; with the destruction of creation it finds its grave. It is the result of creation, and can have existence only as creation stands as a fact. It is a thing separate, contained in eternity but no part of it.

There can be date in time, but there can be no dates in eternity. There can be a beginning and end of time. Every particular thing has its beginning and ending. Such may be a conception of the whole universe. But there is no beginning and ending of eternity. It matters not whether suns blaze or are blotted out, eternity remains the same and unaffected. If there can be no dates in eternity, time, which has date, is of no consequence to it. Hence the beginning of time which is contained in the beginning of creation is a matter of great

concern within itself, but of the utmost indifference as related to eternity.

Hence that longing desire of the human mind to find a very ancient date for a beginning of creation in the first cause is nothing more than to find the greatest conceivable measure of time. Since there is a conception that eternity exists, it is doubtful whether the mind can be fully satisfied with any date as the first creative motion of the first cause. Its highest satisfaction may be attained on the ground of considering that eternity is distinctively different in quality and character from time; that it has its own exclusiveness, its own being, and sustains no relation to time whatever; and that all attempted comparisons of time with it, and all attempts to show the relation of the two, are unbecoming and out of order.

But since the mind desires to find the longest conception of time possible, it very readily conceives that it lies back in the direction of the creative energy. What was the first thing made by the first cause may be unknown to any inhabitant of the universe now existing, and it may have been an act performed in time altogether incomputable to man. This all lies in the unknown and unfathomable past. But since eternity is not concerned with dates, and since one date for a beginning answers as well as another, the physical universe may be regarded as the first creative act, provided the nature of the first cause is not to be taken into the account.

But when the nature of that cause is revealed, that he is spirit, reason suggests, however weak it may be, that some kind of spirit creation first appeared; something in essence like the cause himself. It is natural

that like, even in a creative act, should generate like. Such creation may have an inconceivable date in time. But to have such spiritual masters in a beginning of creation would seem to be a contradiction and to reverse the ideas that have crept into the brain of the materialist or natural evolutionist. It would indicate that the greatest was first. It would furthermore indicate that in whatsoever there is a possibility, an ability, and a disposition to improve and advance, it is an effort to recover something lost by degeneration, rather than to attain a height beyond creative endowment. In this idea there should be taken into the account the difference that exists between created endowment and education. One is the faculties; the other the culture.

Outside of the account of creation given by Moses, the Bible suggests that such was the beginning of creation, or at least of an existing creation anterior to that of which Moses speaks. What is meant by the cherubim which guarded the entrance to the tree of life? Again, what is meant in Job, when, speaking of the material creation, he mentions the singing of "the morning stars" and the shouts of the "sons of God?" Indeed, what is meant by the hundred allusions to spirit intelligences in the Bible? These certainly must be related to some other creation.

Therefore, in seeking for the first act of the great cause, which may be regarded as the beginning of time, a mind in seeking satisfaction is at liberty to fix a date as incomprehensible as eternity itself, a date in which time almost looks like eternity; so that the conception of an uncreating intelligent cause and of a sleeping God is lost in the confusion, not only of incomprehensible eternity, but of incomprehensible time it-

self. If, therefore, the mind inquires after and seeks for rest among the dates of the past, it is impossible to find a satisfying definiteness either in eternity or in time. There is no revelation from God or through nature that can satisfy the mind on this point. It is doubtful, should any such revelation be attempted, whether the mind of man has the capacity to grasp it.

In a survey of the uncreated condition of the universe, and in a survey of the nature and character of the great first cause that dwells in that condition, reason has a right to assert itself. There is no other alternative. It has a right to assert itself through the material world, which is an open book of revelation directing to that cause, and through any direct existing revelation that sets up a claim to be the spoken word of that cause. It has a right to assert itself as to whether there was a necessity for revelation other than that of nature. When reason asserts itself it means an honest pursuit after the truth.

The case stands now assumed that God is the great first cause. In this assumption it is not to be entertained that he is all that different people have claimed. It is not herein set forth to go to these human details of thought which give rise to a multitude of opinions and contradictions. It is only an argument for the allwise and all-powerful God as the first cause of all things. It is a claim that the voice of nature speaks of him; and furthermore, since nature can speak of only his wisdom and power, it is an argument that renders admissible a word that comes from any source that would be the true speech of his moral character, his love, compassion, justice, and mercy.

The physical universe has appeared. Nothing indi-

cates power more than this. It is peyond human conception in its wisdom. The greatness of the work and the wisdom displayed are the two most astonishing parallels of human contemplation. It is all outside the pale of human reason, except that reason brings man to his knees of confession, where he is necessarily compelled to make an acknowledgment. Overwhelmed in the contemplation, shorn of strength to reach into the profound mystery, unable to measure the height and depth, and struck with awe as the pages of the revolving spheres turn the thought to the yet more wondrous cause, man is forced to a conscious feeling of humility, and can but cry out from the depths of his soul, "O God, thou didst it." Man makes his confession on the ground that his reason can find no substitute. If man asks, Why that great cause who antedates all nature? the thought is made to recoil upon the questioner when it is asked, Why not that cause and that character as well as any other? All questions may be hedged with others equally wise and prudent. It all indicates that this cause is the proper stopping place for human thought and investigation.

Strict reason will allow intelligence in the cause, a purpose, a power over matter, the creation and establishment of forces that act with precision and a will. These are necessary to account for the present establishment and harmony of the physical universe. With them everything seems reasonable. Without allowing them, the reason of man begins immediately to stumble in any attempt to account for the existence of matter and the arrangement in which it is placed, and the purpose for which it was used. To speak of an unintelligent force as its own cause is an argument conducted

on lines of perverted reason on the ground that there is nowhere shown a hand or cause that either produces, plans, or upholds. There is contained in it such vanity and such a lack of capacity as that it may be well illustrated in the old mythology where Phaëthon was given liberty to drive the chariot of the sun for a single day. Jupiter, seeing the coming disaster, struck Phaëthon from the chariot and drowned him in the Po to save the world from being set on fire.

A great mind, with purpose, will, and universal power, must be at the head of the present universal arrangement. It is inconceivable how it could exist in any other way. Such wisdom and power is as tangible to the thought and as directly and as strictly related to existence as gravity is to matter. Gravity is universal, has precision of perfect exactitude, but has neither purpose, will, nor intelligence. Yet its existence is acknowledged. Why not acknowledge another universal existence, the first, the uncreated, the wise and the allpowerful, the generator of gravity itself? It is as reasonable that there should exist mind as force. The latter is as unaccountable as the former, unless it be attributed to the former for existence. The universality of the force is as unaccountable as the universality of the mind. The human mind, from some cause, seems to have worked its way into its own inconsistency. It accepts a truth on a certain measure of evidence in one thing, while on the other hand it rejects another truth when supported by the same measure of evidence.

The mind sees a certain nature in matter; it does not know that it is any part of matter. It only knows that the principle works in matter. It calls that principle gravity. In all this there is something known and CAUSE. 22I

something unknown. Yet there is faith and confidence in all, so much so that debate about it is ended. The mind looks again, and in the construction and arrangement of the universe it sees the hand of divine and intelligent power. The mind runs back through the lines written in the action of matter to a cause of that action. Seeing the neat perfection of the system, the mind is unable to attribute less than mind, purpose, will, and power to the cause. In this structure and arrangement there are complications in which gravity plays only a part. If gravity plays only a part in the formation and management of the whole system, then other principles must play the other parts in this complexity of universal matter. So then, when each plays its part in harmony with the others, the whole machinery of universal matter is seen in its work.

But whence this order? Whence this harmony of forces when it is their nature, if unharnessed, to destroy everything but themselves? Whence the harnessed forces themselves? Whence all this order and precision that in the midst of the greatest complexity never gets into confusion? As certainly as there never was a steam engine unless man made it, and as certainly as that whenever a man meets with a steam engine he attributes its existence to design and purpose, so certainly does reason teach that every such complex thing of the earth and the more complex universal arrangement are the results of an intelligent design, purpose, and power.

The forces of life, mind, and will among the creatures of the earth, in their connection with and control over certain measures of matter, are but a miniature illustration of the universal control of matter by the universal mind and power. The limited mind of man is as

accountable and is as hard to find as the universal. The difference consists in conceptions of magnitude and power. Use man as a meager illustration: His body of matter performs many kinds of action. It is universally conceded, however much the body appears to be a living being within itself, that it originates neither the instinct nor the intelligent thought of the motions. They are attributed to the life that dwells in the body and to the peculiar endowment which the life possesses. It matters not whether man is put under review or a serpent, the motions come from the life and endowments. Motions that are made with design and purpose come from a life endowed with mind. Even in man, however, many animal motions are possible with which the mind is no more concerned than that of the beasts whose motions are made with selfish ends. In man also designs may be either of a good or of a bad nature.

But the illustration means to show how matter is harnessed and controlled. It is an old and wonderful sight to see the bodies of matter creeping, walking about, and flying in the air; now slow, now quick, now resting, and now going again. It is acknowledged to be inexplicable when affirmed that matter does it of itself. Sometimes bodies are seen moving that have no life. But the motion is attributed to the wind, volcanic action, gravity, or some other cause. Life is the cause of motion in matter. The endowments of that life give it the varied motions. Extract mind from the things of the earth, and man is life in the condition of other animals. There would be no creature that could exercise design or purpose. Extract life from the things of the earth, and there would remain none of the phe-

nomena showing things of matter creeping, walking about, and flying in the air. It is life that gives motion to matter. It is intelligent life that reduces motion into a connected, orderly, and beautiful system. The thought reaches out from the miniature things of the earth into the great, universal system of matter. Unless mind, who is called God, is in it, there seems to be no possibility of ever finding an explanation. Grant the existence of that intelligence, will, and power, and the mists of long-existing confusion skip away from the human mind and it at last finds its long-wanted rest.

II. Argument a posteriori. This argument is meant to show, through existing things, that in the cause of them there was not only power but intelligent design and purpose. The argument should be made short, lest it appear to be a reversed process of thought, covering the ground and reiterating what is contained in the cause of a priori reasoning. It is easily perceptible how any particular kind of thing may be traced through a structure of secondary causes backward and still backward until the thought and reason are bewildered and lost in infinity, unless a first cause of that particular thing is found or admitted to exist.

For instance, let man be used as the particular thing in the argument. It is easy, through a structure of secondary causes, to trace the son's existence back to his father, and the father's existence back to his grandfather, and so on in regressive steps until the mind becomes weary, and stops and waits for an answer to the question, When and how did the first of the man species appear? The inquiry is irresistable. Man wants to know; and if he cannot know absolutely, he

would have proofs of his origin so weighty and convincing that his mind, so far as this question is concerned, would confidently be at rest. The proofs that would answer the purpose for man would be equally valuable for every particular thing. Hence if a proper cause is found for the origin of man, a proper cause is also found for the origin of every particular kind of thing; and as every particular kind of thing constitutes the whole of things, a cause is found for the universality of things.

Of course at this point the science of this day is met fully in the road, especially that kind of science, if it be worthy of the name, which declares that man is of low origin, for it must here be declared without reservation that men who are called scientists have made a great blunder. The mistake has been made through a lack of perceiving the distinctive difference between the cause-given endowment and the culture that comes by the use of that endowment. Faculties are not made by culture, but culture comes because there are existing faculties. To produce a faculty is not in the power of man. He can no more create one thing than he can another. He simply plays a part in the multiplication of his species, and it is allowed that some of these have bodies that connect the mind with materiality and with better sense-perception than others, but in this there is no creation of a faculty. The endowment is the same with the whole species of man. The difference is in the grades of sense-perception. Hence the body being the medium or lens of sense-perception, the strength of faculty or endowment shows itself according to the degree of the perception. There is no evidence produced which shows that mind, as a principle, is not the

same in all men, that it is not a quality of his spirit life and inseparable from it, and that the spirit life is not one essence and indivisible and as indestructible as an atom of the scientist's conception.

Putting aside the idea of created endowment and turning the mind loose to drift only on the lines of culture, it is likely to conjure up many things that are not true, because it is doing its reasoning on a false basis. It is reasoning on the ground that a faculty is created by a course of training or education, whereas, in truth, education can only train the faculties to use. If the faculties did not exist, there could be no education.

The error committed by scientists is grounded in a mistaken presumption, and in basing their argument in such premise it is no wonder that the whole structure they build is so objectionable and doubtful. It has never been proven that the earliest of the earth's men had less natural endowment than they have at this day. The influences of environment have always had much to do with the manner that the tribes and nations have always reflected themselves as shown in history. But environment has never added a faculty to the mind, nor has it ever produced mind. It is impossible; the ox has always been an ox, and man has always been a man. The ox has no mind, and therefore neither ascends nor descends. Man has always had mind, but environment with him influences differently from environment with the ox. Hence man at one time is seen living in a cave, at another time in beautiful cities, then again gone back to his cave. Yet in all his history he has had mind and unchanging faculties. It is all accounted for on the ground of influences that lead to the exercise or nonexcuse of his faculties. But certain scientists, from

the days of Cicero and even more remotely, have held to the idea that man is of lower origin, and now in this day of highest culture in man's history they are ardently pursuing the task of finding proofs of it; and what is most curious and astounding, is by setting up a claim that man has been evolved from the lower herds of being, bodily form, mind, faculties, and all. Culture, of course, has enlarged the range of thought, but by no means tends to confine people within the limits of reason any more than formerly. The present times indicate that two steeds are pulling the car of progressive thought. One is reason and the other imagination. So that present appearances indicate that culture has not delivered man from superstition, but only shifted its ground; so that now, instead of a superstition of ignorance, there is superstition of the imagination, at least there is in science a believing of many things without the proofs.

The idea of man's low origin is always produced in the circles of culture. The great range of thought in the circles of culture naturally holds many things in contrast. The men of low degree are held in contrast with men of high degree, and uncultured tribes with the cultured, and the ancients with the moderns. But the whole matter, rightly inspected through the channels of history, is but a chain of changed conditions among all tribes and nations of men through the forces of environment; but no environment has ever changed a man to a beast or a beast to a man. It is true in many instances that tribes have sunk very low and have put on many beastly ways, but never beyond the capacity to rise again. The cultured people of to-day, however the thought is hateful and apparently against reason, must

know there exists a possibility that their descendants may decline to the plane of the humblest. Only a few centuries counted back shows an ancestry of the most intelligent societies of man, but little above the civilization of an African Kaffir. But in such decline they would only lose culture. The mind and faculties would remain the same. They cannot be destroyed, and it is on this ground that man is never without hope.

CAUSE.

Man in his earliest being was not supplied with improvements and culture. Even viewed in the light of his divine origin, as given in the Genesis of the Bible, he is reported as a naked being without culture and without a house. Culture and improvement were left to him as a work for his mind and hands. But this was not low origin. It was about the only conceivable way to give origin to a being endowed with mind and body adapted and made subservient to any purpose of improvement. In such origin he may at first have found for himself a sheltering rock or constructed a very unimpressive booth as a place for protection and comfort.

According to this olden history, human life began in the lap of industry and civilization. Early in Adam's family the ground was tilled and cattle were owned and herded, a city was built, there were instruments of music, and there were artificers who wrought in both iron and brass. The stone age, about which so much is said in support of man's low origin, came afterwards by the deterioration of man. In this way arts and civilization, as has often occurred in man's history, were neglected and lost. Of course this is all based on the authority of the history referred to. So the argument of man's origin is not to be based so much on ap-

pearances and conceptions as upon the authority of the history that treats of the origin and character of the civilization which so early accompanied that origin. It is easy to perceive how it was possible for man to so deteriorate as that he had to climb out of his cave into a beautiful city, out of his barbarity into civilization and refinement, out of his deep degeneration to the stone age, and then again still higher to brass and iron.

But having been put to the necessity of giving this brief notice of the present-day skeptical science that stood in the way, the a posteriori argument for the first cause will be resumed. Man is the only earthly being to carry his thought to God as the cause of all things. Man is the only creature on earth so endowed that design and purpose can enter into or be a quality. If he possesses such qualifications, he has mind. In this respect he is differentiated and contradistinguished from all other creatures of the earth. Therefore it puts him in the closest relation as a produced being to the producing cause. He is the only being that thinks and who can carry his thought back to the cause, and the very ground that he can think back to a first cause and can think no farther is no mean evidence of itself that there exists a first cause. Only this limitation confines him, and that is he is able to discover the physical attributes of that cause only as revealed through matter, leaving the moral nature and character of that cause to reason and conjecture, unless specially relieved · otherwise than through matter or any of its phenomena.

The eternal mind at the head and cause of the universe and all that it contains is the most wonderful thought in human contemplation. The next greatest thing of contemplation is the human mind itself. The

gap between is the difference of minds. The one unoriginated and eternal, the other produced; the one allpowerful, the other limited power. One is God's, the other man's. They are both causes—the one primary, the other secondary. They both control matter with purpose—the one the universe, the other his body in particular and then the other bodies through interposition of means. There is similarity and likeness, but a distinctive difference. One is God's, the other is man's. But notwithstanding the difference in quality, the mind is that which places man in closest relation to the first cause.

It is hard to conceive of mind without also conceiving of an entity to contain it. It is hard to conceive of the eternal mind without an entity containing it. Hence it is said, "God is spirit"—that is, an entity of life. Man's body is not spirit nor life. It is only a form occupied by spirit or life. The life or spirit in man's material form contains his mind. Spirit, and not organized clay, holds the nearest relation to spirit, and the minds they contain are in equally close relation. The spirit and mind in man appeal, cry out for their cause. They are told that it comes of the mutation of species and on the line of a "survival of the fittest." But dissatisfied and uncomplaining of bodily forms, they ask, Whence this differentiating and unaccountable feature, this gulf-crossing endowment, the mind and its faculties? Time is given for an answer.

But the mind and the mind spirit being the nearest like and in closest relation to the first cause, and holding a position that the narrowest bridge is between them and the first cause, dissatisfied with the empty reasoning in search of a first cause, and feeling within itself the promptings of an acknowledgment that there exists a great first cause, and weary with the ages that have trifled with intelligence and shifted the thought on unsatisfying trails of error, and seeing that all the skilled efforts of the past have been unable to offer a reasonable substitute as a first cause, the mind and mind's spirit of man cry out in the ecstasy of a free and unembarrassed acknowledgment: "O God, thou art the cause of all things."



